



Directorate of Higher Education Reviews

Programmes-within-College Reviews Report

B.Sc. in Information Technology and Computing
Faculty of Computer Studies
Arab Open University – Bahrain Branch
Kingdom of Bahrain

Date Reviewed: 6–7 February 2013

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Acronyms

AMR	Annual Monitoring Report
AOU	Arab Open University
AOUB	Arab Open University – Bahrain Branch
AOUK	Arab Open University – Kuwait Headquarters
BCC	Branch Course Coordinator
BITC	B.Sc. in Information Technology and Computing
CICP	Centre for Inclusion and Collaborative Partnerships
DHR	Directorate of Higher Education Reviews
FCS	Faculty of Computer Studies
GCC	General Course Coordinator
HEC	Higher Education Council of the Ministry of Education, Kingdom of Bahrain
ILO	Intended Learning Outcome
ITC	Information Technology and Computing
LMS	Learning Management System
LRC	Learning Resource Centre
MTA	Midterm Assessment
OUUK	Open University – UK
PC	Programme Coordinator
QA	Quality Assurance
QAMS	Quality Assurance Management Systems

QQA	National Authority for Qualifications & Quality Assurance of Education & Training
SDS	Staff Development System
SER	Self-Evaluation Report
SIS	Student Information System

1. The Programmes-within-College Reviews Process

1.1 The Programmes-within-College Reviews Framework

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

Programmes-within-College Reviews have three main objectives:

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

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

Indicator 1: The Learning Programme

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

Indicator 2: Efficiency of the Programme

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

Indicator 3: Academic Standards of the Graduates

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

Indicator 4: Effectiveness of Quality Management and Assurance

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

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

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

Table 1: Criteria for Judgements

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

1.2 The Programmes-within-College Reviews Process at the Arab Open University – Bahrain Branch

A Programmes-within-College review of the Faculty of Computer Studies (FCS) at the Arab Open University – Bahrain Branch (AOUB) was conducted by the DHR of the QQA in terms of its mandate to review the quality of higher education in Bahrain. The site visit took place on 6–7 February 2013 for the academic programme offered by the college: B.Sc. in Information Technology and Computing (BITC).

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

AOUB was notified by the DHR/QQA in September 2012 that it would be subject to a Programmes-within-College reviews of its Faculty of Computer Studies with the site visit taking place on 6–7 February 2013. In preparation for the review, AOUB conducted its college self-evaluation of all its programmes and submitted the SER with appendices on the agreed date in December 2012.

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

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

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

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

The DHR would like to extend its thanks to AOUB for the cooperative manner in which it has participated in the Programmes-within-College review process. It also wishes to express its appreciation for the open discussions held in the course of the review and the professional conduct of the faculty members and other staff involved in the BITC programme.

1.3 Overview of the Faculty of Computer Studies

The Faculty of Computer Studies at AOU-Bahrain was established in 2003. It had its first intake of 136 students in that year which has now grown to 418 enrolled students in the year 2013. These ITC students comprise approximately one-third of the total enrolled students at AOU-Bahrain. Hundreds of students have enrolled and graduated over the past decade. Over the past four years, 495 students have enrolled into this program and 279 have graduated. The FCS at AOU-Bahrain currently comprises of five full-time academic staff and three part-time staff.

1.4 Overview of the B.Sc. in Information Technology and Computing

AOU-Bahrain offers the Information Technology and Computing (ITC) programme and its corresponding degree: BSc in Information Technology and Computing. Entry into the programme requires a valid High School Certificate. The BITC degree is conferred upon students who fulfill the requirement of 131 credits; including the latest information technologies such as advanced programming languages, web technology database and networking. These credits must be completed in a maximum period of eight years. AOUB graduates receive two degrees for the BITC programme, one from The Open University (United Kingdom) and one from AOU-Bahrain which is recognized by the HEC upon approval of their criteria.

1.5 Summary of Review Judgements

Table 2: Summary of Review Judgements for the B.Sc. in Information Technology and Computing

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

2. Indicator 1: The Learning Programme

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

- 2.1 The BITC programme academic framework is clearly presented in the SER. The aims and purpose of the programme are related to AOUB mission and strategic goals.
- 2.2 The SER included comprehensive documentation on the BITC programme curriculum, including programme specification, study plan and progression. The curriculum provides a balance of knowledge/skills and theory/practice, and enables year-on-year student progression. The use of Open University UK (OUUK) material for some courses helps to ensure quality. These courses are sometimes regionalized with relevant case studies where appropriate. Some courses have been developed at AOU, providing further potential for regionalization. However, there is not much Bahrain localization since AOU is a distributed university by its very nature. That said, students did not raise any significant issues in this regard. The Panel suggests that AOUB could consider Bahrain localization of some courses (e.g., case studies) where appropriate.
- 2.3 The syllabus (curricular content, level, and outcomes) largely meets the norms and standards of information technology and computing, especially with respect to the OUUK material. It is well documented in the SER material and material available on site. The Panel notes that the ethics content of the BITC programme was recently increased by the offering of 'Ethical and Professional Issues in ITC' (M360), which was approved by the University Council in September 2012. During the site visit, there was a lack of evidence of engagement of the Branch Course Coordinator (BCC) with respect to the BITC programme. It seems that in practice, the General Course Coordinator (GCC) has much greater ownership of courses on the programme. The Panel suggests that more local involvement would enhance the orientation of the syllabus for AOUB students.
- 2.4 BITC programme Intended Learning Outcomes (ILOs) are included in the programme specifications and in general are aligned with the AOU mission. BITC programme aims and objectives and are appropriate for the level of the degree. This aspect is generally well documented. Again, there is significantly greater ownership in this regard by the GCC rather than the BCC.
- 2.5 There are course ILOs with matrix mapping to the programme level. Some of the matrices mapping learning outcomes are quite dense. The ownership of the BITC programme with respect to ILO mappings by the AOUB Branch Course Coordinator seems lacking. The Panel recommends that AOU revisits the ILO mappings and

assesses the appropriateness of them. It may be good to reformulate some ILOs as part of this exercise.

- 2.6 The programme has recently approved the 'IT Industrial Training' (ITC309) as a compulsory course to provide students with work-based learning experience. During interviews, the Panel learned that this course will be offered in the second semester of the 2012/2013 academic year. Many AOUB students undertake the BITC programme part-time while also working. However, the Panel is of the view that the availability of this work-based learning on the BITC programme could also be beneficial for some non-working students.
- 2.7 The principles and methods used for teaching on the BITC programme are in general appropriate for the ILOs. E-learning is central to the AOU approach. However as a rule, 25% of course delivery is through face-to-face interaction. In addition to face-to-face tutoring, self-instructional textbooks, designed for distance learning, are used. Exposure to professional practice and applications could be higher, especially for those students who are not working. Encouragement of personal responsibility for learning on the context of e-learning is important, but does not appear to be a major issue, probably due to the maturity of the student who are already largely in work. Independent learning is encouraged through the use of e-learning.
- 2.8 Assessment policies and procedures are clearly documented in the SER and are available online. These include 'Assessment and Grading Policy Document', 'External Examiner Feedback', 'Continuous Monitoring System: Students' Assessment' and 'Policy for Combating Plagiarism'. During the site visit, the Panel noted that some faculty members do not have as ready online access to these policies as would be desirable. The Panel encourages AOUB to enhance the faculty members' access to the online policies/procedures with appropriate training. Evidence such as examples of double-marked examination papers, written evidence concerning the external examination process provided during the site visit, and a teleconference interview with an external examiner, demonstrate that assessment policies/procedures are sound and appropriately followed. During interviews, the students informed the Panel that they are satisfied with the feedback they receive on their assessment as it improves their academic performance and learning. Students indicated that they receive feedback, mostly online, on each assessment and that the feedback has improved as it now contains more details than before. AOU is a mature institution with extensive assessment policies/procedures and an infrastructure for reviewing of these at a university level. The influence of AOUB in these matters is less clear. There is essentially a top-down structure for the university from AOUK down to the individual branches. There is branch representation, but AOUB is just one of a number of branches in AOU. The Panel suggests that AOU considers mechanisms to improve potential branch influence in the review process.

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

- There is a clear academic planning framework.
- The programme aims are in line with the AOUB mission.
- The programme is contextualised for the region.
- There is an emphasis on blended learning and independent learning.
- The assessment policies and procedures are clearly documented and sound.

2.10 In terms of improvement the Panel **recommends** that AOUB FCS should:

- revisit the mapping of the BITC programme learning outcomes, and to reformulate some ILOs as part of this exercise.

2.11 Judgement

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

3. Indicator 2: Efficiency of the Programme

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

- 3.1 AOUB has a clear admission policy with admission requirements that are aligned with AOU goals. Students applying to the BITC programme must have a general secondary school certificate or its equivalent. Interviewed staff indicated that the AOUB has an open admission policy with the minimum high school grade accepted being 50% (passing grade). AOUB allows students to transfer from the branch of AOU in which they have originally enrolled into any other branch in accordance with the criteria and procedures approved by AOU University Council. During interviews the Panel was informed that the admission policy has not been revised in the last seven years. The Panel encourages AOUB to develop mechanisms to support the acceptance of students with higher GPA in high school and background knowledge in related subjects to the BITC programme.
- 3.2 The admitted students are expected to have previous knowledge in mathematics and information technology and to be able to communicate in English. Accepted students are required to undertake an Oxford English language placement test. Students attaining a minimum of 500 score in TOEFL or the equivalent score in IELTS are exempt from the English Placement Test. Students who fail in the placement test, however, are required to undertake an extensive course in the English language for one semester. The profiles of the admitted students indicate that more than 50% of them have professional experience in their work-place. Most of the students interviewed by the Panel are working, and hence their skills enable them to understand the concepts related to the BITC programme.
- 3.3 AOUB positions its organization chart and its relation to the overall AOUK headquarters (HQ) in Kuwait. The FCS Council, chaired by the Dean, has the primary responsibility for the BITC programme delivery. The coordination between the FCS Dean and the AOUB branch ITC department is the responsibility of the Programme Coordinator (PC). The responsibilities of the FCS Council, FCS Dean, PC and faculty members are clearly outlined in the SER. Moreover, the AOUB has branch-level committees in line with the AOUK HQ committees; these include the Academic Committee, Examination Committee, Community Engagement Committee, Alumni Committee and Quality Assurance Committee. During different interviews, the Panel learned that daily interactions with the AOUK is the norm and is facilitated by e-mail, Skype and video conferencing.

While the Panel appreciates the clear lines of accountability with regard to the management of the programme; it is of the view that the local management is in need

of enhancement. The Panel recommends that AOUB recruits additional qualified staff to ensure the consistency and efficiency of the local management of the programme.

- 3.4 At the time of site visit, the BITC programme had six faculty members, four full-time with Doctoral Degrees, one full-time with a Master Degree and one part-time with a Master Degree. Upon examining the faculty members' C.V.s, it was clear that there is an appropriate range of academic qualification including 'Database' and 'Image Processing'. The Panel was informed that the English and other elective courses are taught by faculty members from the Business Department. During interviews with faculty members, the Panel learned that the teaching load is 10-12 hours per week, with each faculty member teaching three to four courses. As the Panel toured the AOUB facilities, it was apparent that the programme has sufficient supporting staff for the Student Information System (SIS), Learning Management System (LMS), e-library, and IT infrastructure. AOUB encourages its faculty members to engage in relevant research and educational development activities in order to remain updated about the latest developments in the IT field. The Panel was pleased to learn that AOUB provides financial support to encourage faculty members with Masters to pursue higher degrees. A research strategy was recently developed. During the site visit, the Panel was informed that some faculty are involved in research, with seven journal articles published in refereed journals in the past year. The Panel encourages AOUB to enhance the research output of the BSIT faculty members in order to ensure the achievement of the BITC programme aims.
- 3.5 The procedures for the recruitment, appraisal and promotion of academic staff at AOUB are clearly outlined in the SER. During the site visit, there was sufficient evidence from staff interviews and provided documentation that the recruitment and appraisal procedures are applied consistently. However, some faculty members were not aware of the staff handbook and its location on the web. The Panel encourages AOUB to enhance the BITC programme faculty members awareness about the staff bylaws. Newly appointed faculty members are required to undergo an induction programme that comprises a generic AOU induction as well as a contextualized AOUB induction, in addition to hands-on-trainings in SIS, LMS, e-Library and Turnitin plagiarism software. Faculty members interviewed by the Panel expressed their satisfaction with the induction programme indicating that it enabled them to carry out their duties more effectively. The SER refers to regulations for promotion and awarding excellent employees; however there was no evidence of the implementations of these bylaws.
- 3.6 AOU has a centralized SIS that integrates student's information, financial, academic advising, online registration and HQ reporting modules. During the site visit, the Panel was given a demonstration of the online registration and the LMS and found

them to be adequate for meeting the programme's requirements in terms of maintaining student records and producing reports. Staff members interviewed by the Panel indicated that they are satisfied with the SIS as it facilitates formal communication between the different stakeholders. The Panel also learned that AOUB intends to integrate some elements of SIS with LMS in all AOUB branches. The SIS, LMS and Oracle Finance systems enable AOUB to generate differentiated reports that are used for operational planning and managing the programme. The Panel encourages AOUB to progress its work on the integration of the SIS and LMS in order to enhance informed decision-making by the senior management.

- 3.7 AOUB has policies and procedures for the SIS system, an IT disaster recovery plan and examination bylaws to ensure the security of student data and information. The responsibility for protecting the IT systems lies with the IT managers at the AOUB HQ and branches. During the site visit, the Panel was informed that students can access the PCs in the computer laboratories and in the Learning Resource Centre (LRC) with restricted access privileges set by the IT administrator. Staff interviewed by the Panel indicated that they follow the SIS policies and procedures to ensure the security of confidential information, such as student grades, transcripts and financial records. While touring the AOUB facilities, the Panel accessed the storage areas for the marked examination scripts for Midterm Assessment (MTA) and final exams. While the Panel appreciates the mechanisms implemented by AOUB to ensure records security, it encourages AOUB to enhance the security of hard documents transferred between AOUB and AOUB HQ.
- 3.8 During the site visit, the Panel toured the physical resources at AOUB, including class rooms, computer laboratories, learning resource centre, cafeteria, student care centre and staff offices. The LRC has an English language laboratory with eight devices to help students improve their English language skills, and above 200 textbooks and reference materials. The Panel encourages AOUB to increase its LRC stock of printed materials (books and journals) and to consider interlibrary loan for students. In addition to the LRC, AOUB has an e-library that subscribes from five main database providers such as Emerald, ABI/INFORM complete, EBSCO, IEEE Computer Society Digital Library, and Edusearch and Gale Business Insights: Global as a trial Version. The Panel was pleased to learn that AOUB has recently increased the LRC stock to more than five million e-journals and e-books. Students informed the Panel that they are pleased with the improvements in the e-library and the LMS. The LRC and the computer laboratories, including the e-library, MOODLE e-learning management system, support AOUB's open learning system. It is evident to the Panel that AOUB utilizes the limited building space efficiently. Overall, there are adequate physical resources in number and type of equipment for students, laboratories and classrooms are adequate in learning support resources. However, the Panel learned that these facilities can get crowded at certain times of the week

when the number of students increases. During interviews with senior management, the Panel was informed that AOUB plans to move to a new bigger campus by the end of 2013.

- 3.9 AOUB has developed mechanisms to track the utilization of LMS access by staff and students. Evidence was provided in regards to the collection of statistical data and the tracking of some events in the LMS and e-library usage. The Panel recommends that AOUB enhance their tracking system of the usage of the laboratories and e-resources, by analyzing the tracking data and producing reports that enable informed decision-making by the senior management.
- 3.10 Student support at AOUB is coordinated by the Student Care Centre, which works closely with other departments to provide the students with the services they need during their study at the university. As indicated earlier, AOUB provides students with advising, library, e-learning and academic support. Students interviewed by the Panel expressed their satisfaction with the services provided to them, indicating that their academic advisors and SCC staff are always available to address their concerns and queries.
- 3.11 The Students Affairs Department at AOUB arranges for orienting the new admitted and transfer students during the student orientation day. Students are introduced to the university rules and regulations, to the staff tutors, and the registration process and rules. During interviews, students informed the Panel that they find the orientation day useful, particularly that they get hands-on training on the LMS. Students are also provided with an online learning CD, a hand-out of their study plan and the Student Guide. Most of the students interviewed, however, indicated that they had a personal induction as they missed the group induction. The Panel encourages AOUB to revise the scheduling of the students orientation activities to ensure the efficiency of this process.
- 3.12 AOUB has developed mechanisms to track students' progress and identify students at risk of failure. Upon enrolment, each student is assigned an academic advisor to guide them during registration and throughout their study periods. The IT department follows up on the students grades, via the SIS, and forwards the statistics to the department. The Panel was informed during different interviews that any student whose GPA falls below 2.0 is given a warning and is prevented from registering until they contact their academic advisor. Academic advising and personal support are provided by the academic advisors and the Student Care Centre, respectively. The Panel learned in interviews with senior management that a 'Students at-risk policy' has recently been developed and is awaiting approval by the Academic Committee. The Panel encourages AOUB to ensure the consistent

application of this policy in order to identify at-risk students and provide them with timely intervention and support.

3.13 Whilst the current facilities at AOUB are adequate for providing an informal learning environment, the Panel is of the view that the new campus would provide better opportunities for expanding the students' knowledge. During interviews with members of the IT Club, the Panel was informed that several activities have been conducted to expand the student learning experience; these include peer-to-peer tutoring, workshops and exhibitions sponsored by the University. Moreover, the students participate in the community engagement activities organized by AOUB; however these are limited. The Panel encourages AOUB to expand the students' experiences and knowledge through collaboration with the IT industry and through community engagement activities.

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

- There are well-documented policies and procedures for recruitment, appraisal, and promotion.
- The induction and training on the SIS, LMS, and blending learning is effective.
- There is tracking of usage of the library and the e-learning system.
- The use of the learning management system is effective.
- There is an adequate range of student support mechanisms.
- There is a system for tracking at-risk students.

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

- develop mechanisms to support less-well qualified students at the entry point
- enhance the local management of the programme
- analyse tracking data to produce reports that enable informed decision-making.

3.16 **Judgement**

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

4. Indicator 3: Academic Standards of the Graduates

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

- 4.1 Graduate attributes are clearly stated in the SER and related material. Assessment is in general reasonable; however, the Panel is of the view that increasing the practical assessment would improve skills attainment by the students. The Panel recommends that AOU assesses the practical component of the BITC programme overall and includes more practical assessments.
- 4.2 OUUK provides a validation service (OUVS) that is used by AOU as an external reference point for the BITC programme. OUUK itself is monitored by the UK Quality Assurance Agency (QAA). The SER states that ACM and IEEE standards have been used to update the curriculum. The '2010 Visit Report by OUVS' is a letter from the now Centre for Inclusion and Collaborative Partnerships (CICP) to AOUK. In the '2010 Universities Statistics Survey Report by Country', a university world ranking of 8,984 on www.webometrics.info in 2010 is cited. While other AOU branches are included in this ranking, AOUB is not listed. The most recent award listed in the SER is that of 2010, which is rather out of date. Internal benchmarking is done between the seven AOU branches by AOUK. The Panel notes that in practice, the main influence on the BITC programme is OUUK and its validation service and reviewing by external examiners, which follows the UK model. The Panel notes that the involvement of the OUUK and its influence in academic practice at AOU have beneficially helped to maintain standards for the BITC programme. However, the Panel suggests that AOUB benchmarks the BITC programme against similar programmes offered by open universities other than OUUK.
- 4.3 As indicated in Indicator 1, the assessment policies and procedures are sound and appropriately followed. External examiners (as in the UK, due to the alignment with OUUK) are used, which is a very positive point. More recent written evidence of external examining and its effectiveness would have been worthwhile. A teleconference interview was conducted with one of the external examiners and the style appears very much in line with that in the UK. Double marking, group marking, and blind marking are used. Double marking examples were included. More evidence on the procedure if errors in marking are detected could have been presented. Some marking is over-generous. For example, a student project with no references was giving full marks for its references yet there were not references in the report and no convincing reason for this was provided. The Panel recommends that AOUB monitors the fairness of marking more closely. The Panel was also shown the online system for submission of student work. Turnitin is available for plagiarism checking and faculty members were aware of the issue of plagiarism. 20% is

considered an allowable level at AOU, which seems high. Even so, examples of marked work with far higher percentages were shown to the Panel with no evidence of action having been taken with respect to marking. The occurrences of plagiarism should be monitored. The Panel recommends that there should be more training and guidance to faculty and student with respect to plagiarism, in detection, avoidance, and the process for handling plagiarism cases.

- 4.4 There are mechanisms to maintain the alignment of assessments and learning outcomes to help assure the academic standards of the graduates. Evidence of the implementation of these mechanisms were presented in samples of some courses and in ITC Department meeting minutes. However, for skills-based ILOs, appropriate assessment instruments are needed to check these fully. The Panel recommends that AOU reviews assessment methods for practical skills-based ILOs on courses in the BITC programme.
- 4.5 There are mechanisms in place for internal moderation of the BITC programme with respect to the assessment instruments. For example, double marking samples of examination work were provided in the SER. A copy of 'Detailed Assessment Report' (two pages long) was provided; the Panel is of the view that it is not a sufficiently detailed assessment report and that some sections are not very elucidating. The Panel suggests that more detailed assessment reports are prepared in the future, as these would also be useful records for the external examiners.
- 4.6 External moderation is mainly achieved through an external examiner system following the UK model. Evidence of external examiner credentials and feedback was available during the site visit. A teleconference with an external examiner was helpful in establishing that this process is effective.
- 4.7 Much student work is submitted and stored online. The system was demonstrated by a technician to the Panel towards the end of the site visit. Project reports and other work were also available in printed form. Upon examining these reports, it was clear to the Panel that some students do not understand referencing well. In addition, some of the project reports are marked generously. The Panel recommends that students are given more guidance on report writing, especially referencing, and that there be more scrutiny of the marks by the GCC and the BCC.
- 4.8 The monitoring of OUUK and the use of external examiners has helped to maintain the quality of the BITC programme. 'Branch cross-tabulation table' shows that AOUB is in line with most other branches. The Panel notes that some AOU branches have considerably worse results on the BITC programme compared to others from evidence presented during the site visit. This has the potential to skew marks for AOUB students. The Panel suggest that this issue be monitored carefully by AOU for the future.

- 4.9 The Panel notes that there is a student dropout problem at AOUB. According to a study conducted by AOUB, several factors contribute to this problem including work, family responsibilities, lack of knowledge of English and mathematics, instruction language, and low GPA. Student dropouts, progress and success rates are challenging problems and needs to be addressed. The SER discusses the issues of the ratio of admitted students to successful graduates. Initially in the early 2000s there were many Saudi students before the AOUB opened a branch in Saudi Arabia and many transferred to this. The monitoring of OUUK also raised standards, which meant that a number of weaker students changed courses (e.g., to business studies). 348 students graduated over the last six years, 58 students on average per year. The first year progression rates and more detailed graduation numbers were presented in SER. The graph of first year progression rates shows this to be around 50–65% depending on the year. A higher rate would be desirable, but this probably reflects the standards imposed through OUUK. Progression rates for later years have not been presented, nor has explicit information on drop-out numbers. Rates of progression, retention, year-on-year progression, length of study and first destinations of graduates could have been presented in the SER in a clear and comprehensive way. The Panel suggests that AOUB maintains more statistical information on student progress to help monitor this compared to other branches and open universities.
- 4.10 As indicated earlier, the 'IT Industrial Training' (ITC309) was recently approved as a compulsory course to be offered in the second semester of 2012/2013 academic year. At the time of site visit, no samples of assessed work-based learning were yet available to the Panel, and no policy/procedure on this was presented with the SER. However, a significant number of students (more than 50%) study on the BITC programme part-time, while also working full-time. The project is an opportunity to undertake work-related study if this is appropriate. The Panel notes that two of the three letters provided as evidence from employers have no explicit indication of AOUB involvement. The Panel recommends that AOUB develops a more formal policy/procedure on the area of work-based learning and its assessment. The Panel suggests that the possibility of an internship may be appropriate for some non-working students and the AOUB could provide this facility as part of the BITC programme.
- 4.11 The BITC programme includes a senior IT project, which may be group or individual work, by choice of the student. The criteria for evaluation of the final project are clearly defined in a detailed manner. The project mark is assigned by a panel comprising the student supervisor, internal examiner and external examiner. However, in the two sample marks provided with the SER and other work presented during the site visit, the students are awarded very high marks. In one example mark sheet, the marks awarded total is given as 30 when it should be 29, a minor error, but

it does not appear to have been checked. There is no evidence of double marking for projects. Since projects are important, the Panel suggests that double marking would be beneficial. The Panel encourages AOUB to develop a specific policy/procedure for the BITC programme project.

- 4.12 There is a central advisory board based at AOUB. Written and verbal evidence of a planned BITC programme advisory board at AOUB was provided. The Panel recommends that AOUB proceeds with further steps in the activation of the planned BITC programme advisory board, including the finalization of its terms of reference, and the utilization of its feedback to inform BITC programme decision-making.
- 4.13 Employer and graduate survey results were provided with the SER. However, there are only five responses in the employer survey, making its statistical validity questionable. Verbal feedback was provided by some graduates and employers during the visit. There seems to be general satisfaction with AOUB, although it was a relatively small sample. The Panel encourages AOUB to undertake more extensive surveys of employers and graduates.
- 4.14 In coming to its conclusion regarding the Academic Standards of the Graduates, the Panel notes, *with appreciation*, the following:
- The external examination system is effective.
 - There are appropriately implemented assessment procedures.
 - There are mechanisms to maintain the alignment of assessment and outcomes.
 - There is verification of the moderation system.
 - The criteria for evaluation of the final project are clearly defined.
 - There is a general satisfaction with BITC graduates among stakeholders.
- 4.15 In terms of improvement, the Panel **recommends** that AOUB FCS should:
- monitor the fairness of the marking of students work more closely
 - monitor the occurrence of plagiarism and provide more training to faculty and students with respect to plagiarism
 - review the assessment methods for practical skill-based ILOs
 - activate the planned programme advisory board and utilize its feedback to inform decision-making.

4.16 Judgement

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

5. Indicator 4: Effectiveness of Quality Management and Assurance

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

- 5.1 All policies, procedures, regulations and bylaws available in AOUB are defined centrally by the AOUK institutional headquarters (HQ) in Kuwait. The AOUK policies, procedures, regulations and bylaws are well-documented and are made available to all full-time faculty and staff via local intranet and in a password-protected page in the University main website. Some of the policies and procedures were compiled locally at Bahrain Branch into a Policies & Procedure Manual and made available to staff. There is an attempt to compile a Quality Assurance Manual at AOUK and about which the QA office at AOUB was asked to provide its feedback. The effectiveness of the university policies, procedures and regulations is evaluated through an annual internal review process whose results are recorded in an Annual Programme Evaluation (APE) Form as part of the Annual Monitoring Report (AMR). The annual review incorporates collection of relevant statistical information, survey of key stakeholders and external assessment and review by the CICP. However, the Panel noticed that some policies and procedures like the ones for at-risk students and for combating plagiarism only exist implicitly within university bylaws such as BA Award Requirements Bylaws and Examination Bylaws. Furthermore, it was evident during the site visit that some faculty members are unaware of some of these existing policies, procedures, and bylaws, and were unable to access these documents on the AOUB intranet or the password-protected website. The Panel encourages the University to improve the dissemination and awareness of policies and procedures among all stakeholders.
- 5.2 The BITC programme offered at AOUB has a Programme Coordinator who is the head of the ITC department. The local PC reports to the Dean of the FCS who is at AOUK HQ level and the overall programme leader: managing the programme in all branches and responsible for the main academic issues of the programme. For each course, the dean, in coordination with the local PCs, assigns a GCC and a BCC at every branch. The BCC coordinates with and reports to GCC in all course related matters. There are clear lines of accountability defined in the university and branch organizational structures and the Quality Assurance Management Systems (QAMS). The QAMS and the University Bylaws define the roles and responsibilities of main central and branch committees that assure, monitor and evaluate the quality of the programme. However, all branch committees are at the university level and there are not any departmental committees that participate in the management of the programme or contribute to the programme's quality assurance, monitoring and evaluation. Indeed, the Panel noticed during interviews that the local management of

the programme is focused mainly on the logistic and not the academic aspects of the programme as it is left to the GCCs and the dean of FCS. Furthermore, there is no clear evidence of effective contribution of local faculty members within the ITC department to the quality management, assurance and improvement of the programme. The Panel encourages the University to enhance the role of local faculty members in the programme's quality assurance processes.

- 5.3 The University has a clear dispersed QAMS that is clear and well-documented. The QAMS is designed, monitored and evaluated at AOUC by the Central QA Committee and QA Department whereas the detailed implementation, monitoring and other QA related activities at the branch level are assigned to the Branch QA committee and QA unit. Furthermore, there are various central and branch committees constructed for different academic purposes including examination, curricula, faculty development and research. The roles and responsibilities of the central and branch QA committees and the QA department and unit are clearly described in the QAMS. Continuous coordination between central and branch QA and academic related committees, department and unit is ensured through regular video conferencing and annual reports. On the other hand, the daily teaching/learning activities are managed and monitored via the GCCs in coordination with the BCCs. The QA Unit at the branch level helps in monitoring the overall student satisfaction of the programme through regular surveys whose analysis and results, in addition to other related information and statistical data, are incorporated into the APE as part of the AMR which is forwarded to the central QA committee for evaluation and improvement of the programme. Moreover, the monitoring of administrative services and procedures has been improved with the use of the online system 'Issuetracker'. However, the Panel noted during the site visit and from submitted evidences that neither the QA unit nor the branch QA Committee is involved in the monitoring process of the implementation and the evaluation of the effectiveness of some academic policies and procedures at the programme level such as, e.g., quality of course files, the effectiveness of the advising procedures and measures in place to support at-risk students.
- 5.4 AOUC has many QA related documents available on a local intranet to which all faculty and support staff have access. Moreover, the QA unit conducts regularly inductions and Quality Circles on campus for all faculty and staff to share good quality practices. Faculty and staff (especially new ones) are provided with necessary training and briefing on, e.g., Student Information System, e-learning and LMS, e-Library, Turnitin, online complaints and appeals system, examination bylaws and invigilation. The Panel is in particular pleased to know that tutors are well briefed on the blended learning pedagogy within the open learning philosophy and environment. Any knowledge gathered at such workshops conducted on campus or at AOUC is archived on the local intranet for benefit of all faculty members who

receive automatic alerts upon uploads of new documents. It was evident during the site visit that faculty and support staff are generally aware of the QA related processes and procedures and understand the importance of their roles in assuring and monitoring the quality of the programme. However, the Panel learned during interviews with faculty members, that the majority of them did not participate in the development or the revision of the programme and course specifications. This is due to the fact that the whole programme specification is designed, reviewed and revised centrally at AOUC taking into consideration feedback solicited from all branches. Thus, the Panel encourages the University to ensure that all faculty members are involved in the process of development, review and revision of all academic issues related to the BITC programme.

- 5.5 The Panel was informed during interviews that AOUC does not have any formal policy or procedures for developing and approving new programmes. Instead, the university follows the policy and procedure of OUUK (stated in terms of CICP guidelines) and takes into consideration the requirements of the HEC and the feedback collected from various stakeholders such as academic reviewers, external examiners, students, tutors, alumni and employers. It is the view of the Panel that the university needs to develop its own policy and procedures for the development and approval of new programmes that might be in line with OUUK policy and procedures but also consider the special context and structure of AOUC.
- 5.6 AOUC has an annual institutional evaluation process designed to satisfy OUUK requirements. It involves the preparation of a comprehensive Annual Monitoring Report which incorporates Annual Program Evaluation forms that have to be filled for all programs offered by AOUC in all branches. The APE form includes statistics and information regarding students and faculty within the program, analysis of student feedback and responses from external examiners who moderate and verify the quality of assessments in each semester. Moreover, the AMR includes also an Internal Review Questionnaire that is used to improve student related activities in the program. The AMR is submitted to CICP for review, feedback and recommendations which are channelled down to all branches for implementation and improvement. However, the Panel noticed that the recommendations are based on all APEs collected from all branches and so they may not be the best fit for the BITC programme offered at AOUB. The Panel suggests that the recommendations of improvement should be made based on the programme's performance within the AOUB Bahraini branch only and independent of the data and information collected from other branches.
- 5.7 The University adheres to a comprehensive periodic programme review process as part of the five-year revalidation process by the CICP in OUUK through which each branch is required to produce a Self Evaluation Document in all academic and

administrative areas. There is clear evidence of improvements as a result of the periodic review of the BITC programme that incorporated internal and external feedback, benchmarking and market studies.

- 5.8 AOU collects stakeholders' feedback mainly through surveys conducted regularly by the QA unit. The university conducts a set of surveys to solicit feedback from students, alumni, employers and faculty. The student and faculty satisfaction surveys are designed at AOUC and conducted periodically towards the end of each semester. However, to address the branch needs, the QA unit at AOUB can further customize the surveys by adding some questions on, e.g., plagiarism awareness, Orientation Day, and Student Care Center. Moreover, the University uses the Online Complaint and the IssueTracker Systems as other means for collecting students' feedback and for tracking students' issues and complaints. Students also have another opportunity to send their concerns to the management via the elected Student Council whose representatives are invited to the Quality Circles conducted by the QA Unit, the Branch QA Committee meetings and the Branch Council. The Panel found sufficient evidence that the collected feedback is used to inform decisions and improve the programme performance and results are made available to stakeholders.
- 5.9 The Staff Development System (SDS) at AOUB is designed by the QA Unit based on the AOUC policy on staff development. Under the leadership of the Vice Rector of Research Planning and Development, the QA Unit at the branch level identifies continuing professional development needs for all staff and meets them through regular training programs and briefing workshops. The current SDS contains an annual Professional Development Plan and an annual Training Plan for Administrative Staff. Furthermore, to ensure an effective staff development program, the university offers a Staff Appraisal System that focuses on the enhancement of job performance, personal development and career planning. The Panel commends the senior management for the support provided to faculty and administrative staff to improve their overall performance and especially enhance the quality of their teaching and research skills.
- 5.10 AOUB has an Alumni Club consisting of all graduates from programmes offered by the university. AOUB obtains feedback from its Alumni who hold IT-related jobs. Furthermore, the Panel learned during site visit that feedback regarding the labour market is collected from alumni and employer surveys or directly from the AOUC advisory board or the Faculty Board of the FCS. Both boards have members from industry. The Panel was informed that the branch Advisory Board held only two meetings so far. There is also evidence of market studies, conducted by Tamkeen and GulfTalent, used during the development and the review of the newly modified BITC

programme. The Panel did not find any evidence of a survey conducted specially for scoping the local and regional markets.

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

- The AOU policies, procedures and regulations are well documented and made available to all faculty and staff.
- The quality assurance management system is sound and in place.
- The senior management is committed to quality assurance and to the promotion a continuous quality improvement culture.
- The 'Staff Development System' provides the faculty with sufficient support to improve their overall performance.
- There are e-systems to monitor and track students and staff concerns and complaints.
- There is a comprehensive annual and periodic programme evaluation and review.

5.12 In terms of improvement, the Panel **recommends** that AOUB FCS should:

- differentiate policies from the AOU bylaws and, in particular, develop stand-alone teaching and learning policies
- develop an effective local monitoring system to ensure the proper implementation of academic policies, procedures and regulations
- ensure that recommendations for programme improvement received from AOUB are the best fit for the programme at AOUB
- develop a policy and procedures for the development and approval of new programmes that consider the special context and structure of AOU.

5.13 **Judgement**

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

6. Conclusion

Taking into account the institution's own self-evaluation report, the evidence gathered from the interviews and documentation made available during the site visit, the Panel draws the following conclusion in accordance with the DHR/QQA *Programmes-within-College Reviews Handbook, 2012*:

There is confidence in the B.Sc. in Information Technology and Computing of the Faculty of Computer Studies offered by the Arab Open University – Bahrain Branch.