



هيئة جودة التعليم والتدريب
Education & Training Quality Authority
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Directorate of Higher Education Reviews

Programme Follow-Up Visit Report

**Bachelor of Science in Information Technology
University College of Bahrain
Kingdom of Bahrain**

Second Follow-up Visit Date: 23 November 2017

First Follow-up Visit Date: 20 April 2015

Review Date: 3-4 February 2013

HC107-C2-Fb002

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The Programme Follow-up Visit Overview

The follow-up visit for academic programmes conducted by the Directorate of Higher Education Reviews (DHR) is part of a cycle of continuing quality assurance reviews, reporting and improvement by the Education & Training Quality Authority (BQA) in the Kingdom of Bahrain.

The second follow-up visit applies to all programmes that have been reviewed using the “Programmes-within-College Reviews” Framework, and received a judgement of ‘limited confidence’ or ‘no confidence’ during the review and received a judgement of ‘Inadequate progress’ during the first follow-up visit.

This follow-up visit Report is a key component of this programme review follow-up process, whereby the Bachelor of Science in Information Technology, at the University College of Bahrain (UCB) in the Kingdom of Bahrain was revisited on 23 November 2017 to assess its progress, in line with the published review Framework and the BQA regulations.

A. Background

The programme review of the Bachelor of Science in Information Technology, offered by UCB was conducted by the DHR of the BQA on 3-4 February 2013.

The overall judgement of the review panel for the programme was that of ‘**Limited confidence**’, where the panel’s judgement for each indicator was as follows:

Indicator 1: The learning programme; ‘**satisfied**’

Indicator 2: Efficiency of the programme; ‘**satisfied**’

Indicator 3: Academic standards of the graduates; ‘**not satisfied**’

Indicator 4: Effectiveness of quality management and assurance ‘**not satisfied**’

A follow-up visit was conducted in April 2015 in which the overall progress of addressing the recommendations of the review report was judged ‘Inadequate progress’. Consequently, the main purpose of this second follow-up visit is to assess the progress the institution achieved in addressing those recommendations judged ‘partially addressed’ and ‘not addressed’ in the first follow-up visit report and as a result reach an overall judgement about the institution’s progress. To this end, the DHR constituted a Panel consisting of two members to conduct the second follow-up visit, which incorporates the review of the progress report and the supporting materials submitted by UCB, in addition to the documents submitted during this follow-up visit and information extracted from the interview sessions. In its judgement, the Panel adhered to the rubrics stated in Appendices 1 and 2.

B. Overview of the Bachelor of Science in Information Technology

The Bachelor of Science in Information Technology (BSIT) programme was first offered in September 2002, by the Information Technology Department of UCB. The programme aims to 'provide students with strong basic information technology knowledge based on steeping in the humanities social sciences and liberal art' as stipulated in the programme specification, and has two main concentrations; computer science (CS) and Management Information Systems (MIS). The programme was subjected to a number of reviews by the institution, last of which was in 2017, in preparation for this follow-up review.

Since its establishment, the programme has graduated a total of 155 students and at the time of this follow-up visit, there were 15 students enrolled in the programme; one in the CS concentration and 14 in the MIS. The Department employs three faculty members (2 specialised in CS and 1 in MIS), who in collaboration with faculty members from the Business Administration Department, participate in the delivery of the programme.

1. Indicator 1: The Learning Programme

This section evaluates the extent to which the BSIT programme of UCB, has addressed the recommendations outlined in the programme review report of February 2013, and not fully addressed during the first follow-up visit of April 2015 under Indicator 1: The learning programme; and as a consequence, provides a judgment regarding the level of implementation of each recommendation for this Indicator as outlined in Appendix 1 of this Report.

Recommendation 1.2: *Review the programme and course ILOs, ensuring that they are aligned with the programme aims and objectives*

Judgement: *Not Addressed*

UCB revised the Programme Intended Learning Outcomes (PILOs), concentration Intended Learning Outcomes (ILOs), course specifications and the Course Intended Learning Outcomes (CILOs) as provided in the submitted evidence. During interview sessions with senior management, the Panel was informed that the PILOs represent the distinctive characteristics expected from BSIT graduates, while the concentrations ILOs are discipline-specific, and the CILOs measure students' achievements by the end of the course. The Panel studied the revised PILOs and noted that these are constructed as a combination of MIS and CS concentration ILOs, which lead to inappropriate mapping outcomes. For example, in C1, BSIT students are required to 'interpret knowledge of computing, mathematics, and management ...', but there are no adequate mathematics components to fully achieve this PILO by the MIS students. In contrast, there are no adequate management components to fully achieve this PILO by the CS students. Moreover, only MIS students can achieve B1 PILO with a wide range of business needs including those found in the industry. Moreover, there are PILOs that are difficult to achieve in the absence of the required CILOs. For example, in A2 students are required to 'recognize the use of scientific principles in the creation, use and support of computing systems...', but none of the courses included in the study plan has CILOs that cover scientific principles and enrich students with required knowledge, understanding and skills about scientific principles. Moreover, there is inappropriate mapping of some courses to PILOs as shown in the submitted evidence. For example, English II (ENGL102), Cultural Studies (WCS201), Bahrain Modern History (SBS206), Studies in American Literature (LIT203), are all mapped to C1. Although the programme specification document states that the structure of the programme was influenced largely by requirements of the Association for Computing Machinery (ACM), the Association of Information Technology Professionals (AITP) and the IEEE Computer Society, no evidence was provided to the Panel to support this claim. Moreover, during the follow-up visit, the Panel learned that the College did not benchmark the PILOs with other programmes, validate it through an external reviewer, or align it with professional bodies' requirements, in order to compare the revised ILOs with similar programmes, or align them to international standards. The Panel finds this an important step toward achieving the institution's mission and vision, which are stated on the website as: 'It seeks to achieve sustained local, regional

and international recognition as a modern, quality-enhanced learning and teaching environment training graduates for successful competitive entry into the knowledge economy anywhere in the global economy' and 'Alignment of educational programs with global standards while maintaining regional relevance'. Furthermore, evidence provided shows that the approval of the revised PILOs and CILOs was on 18 September 2017 by the Head of Department and two other faculty members who joined UCB on 14 September 2017. The Panel is concerned with the quality of discussion based on the limited time given to the newly joined faculty members to comment on the revised ILOs. The Panel has also studied the provided course specifications and found that there are CILOs that are not achieved through the suggested topics, teaching methods and assessments methods. For example, In Introduction to Web Design (CIT210), CILOs A2, B9, C5, D2 require high level knowledge, skills and thinking. However, no problem-solving is provided to cover A2 in week 1, and D2 in week 4 has no real-life applications. For System Analysis and Design (CIT317), B10 is about gaining analysis skills; while, it is mapped to simple explanation questions in the final examination of 2016-2017. Therefore, the Panel considers this recommendation not addressed and recommends that the Department should revise the PILOs, benchmark them and revise the CILOs and course specifications to ensure consistency and accuracy of course files.

Recommendation 1.4: *Develop and implement appropriate stand-alone assessment policies and procedures, in line with the existing regulations*

Judgement: *Partially Addressed*

UCB revised the current assessment policies to address the gaps from the last follow-up visit. The policies introduced are Student Academic Integrity Policy, Assessment Design Policy and Policy for Course Recording and Security of Assessment. However, it is not clear when these policies were approved and what is the approval mechanism followed by UCB. The Panel studied the submitted University College Council (UCC) minutes of meetings but found no evidence of formal approval of these policies. During the interview sessions with staff, the Panel was informed that these policies are not yet approved by the UCC, however, they are in place. The Panel finds this practice inappropriate and urges the Institution to ensure that all policies are officially approved and endorsed before being implemented. Moreover, interviewed staff were not aware of a number of issues relevant to these policies. For example, the maximum number of times a student can repeat a course and the way the grade of repeated courses will be calculated in the Cumulative Grade Point Average (CGPA), as stated in the revised assessment policy, was not clear to them. Moreover, staff provided inconsistent responses about the actions taken toward plagiarism cases. Similarly, meeting with students revealed that they are unaware of the current assessment policies used in the programme and their implications, nor of the grading mechanism for repeated courses or the actions taken toward plagiarism cases. The Panel recommends that UCB should expedite the approval of these policies and conduct

necessary awareness for all stakeholders about these changes. Hence, the Panel considers this recommendation partially addressed.

2. Indicator 2: Efficiency of the Programme

This section evaluates the extent to which the BSIT programme of UCB, has addressed the recommendations outlined in the programme review report of February 2013, and not fully addressed during the first follow-up visit of April 2015, under Indicator 2: Efficiency of the programme; and as a consequence, provides a judgment regarding the level of implementation

Recommendation 2.1: Implement clear lines of accountability with regard to the management of the programme

Judgement: Not Addressed

The UCB organizational structure indicates that the Head of Information Technology Department (HoD) is responsible for the management of the BSIT programme and reports to the Vice President of Academic Affairs (VP-Academics), who in turn reports to the President. Minutes of meetings of Human Resource (HR) Department indicate that the VP-Academics was hired on 14 September 2017. The VP was hired to also assume the position of the Director of Quality Assurance and Accreditation, and in this role, he also reports to the President. This was clarified during the follow-up visit, as this post was not included in the submitted organizational structure.

Moreover, UCB has 14 standing committees; the Technology and Information Department is represented in 10 of them. The Panel is concerned that the number of committees in which faculty members are involved is very high, especially that two of the three faculty members have joined the Department very recently and are yet to be acquainted with the Institution and its policies and procedures. Moreover, during interviews, the Panel was not provided with a clear explanation on how overlaps between the different committees are managed. The Panel is also concerned with the way these committees operate and the mix in the hierarchy between the committees and the roles assigned through the organizational structure. For example, UCB's President serves as a member in the Human Resource Committee, which is chaired by the Director of Finance and Administration, who in the institution's organizational structure reports to the Executive Director of Administration and Planning, who then reports to the President. The Panel is concerned that the lines of responsibility and accountability are not logical and impractical. Hence, the Panel considers the recommendation not addressed and recommends that UCB should revise its organizational structure and standing committees' structure to ensure that the programme is managed in an effective and logical manner.

Recommendation 2.2: *Recruit more faculty members, with appropriate academic qualification and specialization*

Judgement: *Partially Addressed*

The progress report states that the Department of Information Technology has recruited two faculty members, thus bringing the total number of faculty members employed by the Department to three PhD holders (2 specialised in CS and 1 in MIS). For the academic years 2015-2016 and 2016-2017 the Department employed one faculty member only, who is the current HoD, in addition to one part-time faculty member, except for the first semester of the academic year 2015-2016 where a second part-time faculty member was employed. All these faculty members are specialised in CS. During interview sessions, the Panel learned that the main factor for deciding on the number of faculty members needed is the total number of students enrolled in the Department and the Higher Education Council requirement, according to which a minimum of three faculty members per Department is required. Nonetheless, with only the HoD being the consistent faculty member since the last review and the first follow-up visit, the Panel is concerned with discontinuity in the department's faculty that might affect the programme's delivery and improvement process, especially at a time where the programme is going through major changes. The Panel studied the provided CVs of the current faculty members and is concerned that while almost all the current students (14 out of 15) are specialised in MIS, there is only one faculty member specialised in MIS and he has joined the Department only recently (September 2017). Moreover, evidence provided indicates that a number of the courses relevant to the MIS specialisation are taught by faculty of the Business Studies Department. During interview sessions, the Panel came to know that eight full-time and four part-time faculty members from the Business Studies Department were responsible for delivering courses from the BSIT curriculum during the first semester of the academic year 2017-2018. The Panel acknowledges UCB's efforts towards addressing this recommendation and recommends that the Department should ensure the stability amongst its faculty and that the MIS courses are taught by specialised faculty members. Hence the Panel considers this recommendation partially addressed.

Recommendation 2.3: *Deploy a tracking system for actual usage of resources such as laboratories and e-resources and evaluate information for decision-making on better utilization of the resources*

Judgement: *Not Addressed*

The progress report states that this recommendation is addressed through maintaining attendance sheets for the courses taught in laboratories and as evidence for the utilization of the tracking system for decision making, the Panel was provided with warning letters sent to students whose absentee rate is 10% or less. The Panel is concerned that this is irrelevant for assessing this recommendation, as this recommendation is concerned with having a tracking system for the utilization of

different teaching and learning resources and using the outcomes of such tracking systems to inform decisions on what resources are needed to ensure quality delivery of the programme. The progress report also states that a tracking system is utilized for the e-learning resources available. However, evidence provided is limited to raw data extracted from the e-resources indicating the name and role of the user, activity time and duration, without any analysis to what has been accessed and by whom, in addition to screenshots of research activities that do not provide any analysis of the trend of utilisation of e-resources within the institution as a whole, let alone in relation to the programme. Evidence was also provided on warning letters given to those who did not return the books they borrowed from the library.

During interview sessions, the Panel was informed that being a small Institution, UCB keeps track of the utilization of its library and computer laboratories manually as it is not hard to monitor their utilization. The Panel is concerned that the current understanding of what tracking of resources means amongst relevant staff members is not clear and also concerned about the fact that the tracking activities in relation to the BSIT programme decreased since the first follow-up visit, as indicated by the submitted evidence and the interview sessions. Hence, the Panel considers this recommendation not addressed and recommends that UCB should deploy a tracking system for actual usage of resources such as the library, laboratories and e-resources to inform decision-making.

Recommendation 2.4: Formalize the intervention mechanisms and support provided for students at risk of failure

Judgement: *Not Addressed*

In UCB's endeavour to address this recommendation, the progress report states that the Information Technology Department in collaboration with the Quality Assurance and Accreditation Centre (QAAC), have developed a mechanism for supporting students at risk of academic failure, which mainly comprises documenting the meetings academic advisors have with these students. During interview session, the Panel was informed that at-risk students are identified as those who have a CGPA of 1.7 or less. The Panel is concerned that with the graduation requirements entailing a minimum CGPA of 2.00, there is a group of students at risk of academic failure who are not identified by the current system. Hence, no prevention is taken to support them and ensure that they can graduate in due course. Moreover, evidence provided indicates that most identified at-risk students stay without much change in their status, which questions the effectiveness of the current practices adopted by the Institution for these identified students. Hence, the Panel considers this recommendation not addressed and recommends that the Department should revise the criteria used to identify students at risk of academic failure and assess the effectiveness of the current support processes.

3. Indicator 3: Academic standards of the graduates

This section evaluates the extent to which the BSIT programme of UCB, has addressed the recommendations outlined in the programme review report of February 2013, and not fully addressed during the first follow-up visit of April 2015, under Indicator 3: Academic standards of the graduates; and as a consequence, provides a judgment regarding the level of implementation of each recommendation for this Indicator as outlined in Appendix 1 of this Report.

Recommendation 3.2: Develop and effectively implement formal benchmarking policies and procedures for the BSIT programme

Judgement: Not Addressed

UCB reviewed its Benchmarking policy and developed benchmarking process and procedure with a template document for data collection. However, the procedure is at a high-level context, thus, for example, while it states that benchmarking will be conducted with two international universities, it does not identify the bases for selecting these universities and why there is no benchmarking activities with programmes offered by regional or local institutions. In addition, the procedure does not specify the approach to benchmark graduates' achievement, programme aims or the PILOs. According to the submitted progress report, the Institution will complete the benchmarking report in December 2017, yet the Panel found no evidence of a formal periodic process for benchmarking that is carried out nor that the findings of the conducted benchmarking activities, be it informal, are used to improve the programme or its delivery. Moreover, interviews conducted with staff members revealed that the process of incorporating the benchmarking outcomes is not clear. Therefore, the Panel considers this recommendation not addressed and recommends that UCB should revise its benchmarking procedure, to ensure that it is comprehensive and stipulates how universities are selected and that outcomes of the benchmarking activities are utilized to improve the programme and its delivery.

Recommendation 3.3: Consistently implement, monitor and regularly review assessment policies and procedures, especially with respect to plagiarism awareness and training

Judgement: Partially Addressed

UCB reviewed the assessment policies and introduced the Student Academic Integrity Policy that defines plagiarism and the consequences of such acts of misconduct. The policy was discussed during the meeting of QAAC; however, it is not clear from the evidence provided when it was approved nor who were involved in this process. During the follow-up visit, the Panel learned that the policy has not yet been approved

by UCC as indicated in the paragraph under recommendation 1.4. Moreover, there is no evidence of formal training or awareness campaigns for students to build an anti-plagiarism culture in the Department. In meetings with staff and students, the Panel noticed that there is no shared understanding of the actions taken toward cheating and plagiarism cases.

Moreover, the Panel found no evidence that the assessment policy is monitored or subject to regular reviews by the responsible unit to ensure better guidance to academics on assessment aspects. While the submitted progress report suggests that assessment policies and procedures are consistently applied and monitored by QAAC, there was no evidence with regard to monitoring the implementation of the assessment policies, to identify whether the staff are appropriately and consistently applying the range of the reviewed policies in the BSIT programme. Hence, while the Panel acknowledges the institution's efforts in revising the assessment policies and procedures, the Panel recommends that UCB should systematically implement its monitoring process to ensure that the assessment policies and procedures are implemented consistently, and that there is a shared understanding amongst staff and students of what plagiarism is and how identified cases are managed.

Recommendation 3.4: Develop appropriate and effective formal mechanisms for the alignment of assessment instruments with ILOs

Judgement: Not Addressed

The assessment policy has a pre-assessment moderation process that ensures the alignment of the assessment to CILOs. In addition, Course Specifications identify the assessment tools used for assessing different CILOs. However, the links between assessment tools and CILOs are, in a number of cases, inaccurate and do not measure the achievement of the CILOs, as evidenced from the course files submitted during this visit. Despite that the assessment policy provides the mechanism for ensuring the alignment of assessment tools to the CILOs, the Panel found that within the BSIT programme, this process is not effective. There is clear evidence of inaccurate alignment of assessment instruments with ILOs. For example, in System Analysis and Design (CIT317), the ILO B10 is about development of analysis skills while in the final examinations for year 2016-2017 the mapped questions (Q5 & Q6) require simple explanation of features of UI technology. A3 and B8 are mapped to Q2a and Q2b, which require simple explanations of the different kinds of use cases and listing of the benefits of use cases. In Human-Computer Interaction (MIS479), B11 is mapped to Q4 in the final examination (2016-2017), through which advanced implementation and design skills cannot be assessed. Therefore, the Panel considers this recommendation not addressed and recommends that UCB should revise the mechanism used for alignment of assessments with ILOs to be more effective.

Recommendation 3.5: *Develop and implement formal mechanisms for internal programme moderation and monitor its effectiveness.*

Judgement: *Partially Addressed*

UCB submitted a sample of moderation forms that represents the moderation mechanism for examination papers through another faculty member. During the follow-up visit, the Panel scrutinized the course files of the BSIT programme. There is a moderation form for every midterm, and final examination where an alternate faculty member performs the pre-assessment moderation and then submits the form to the HoD for approval. However, the Panel is concerned that the small size of faculty, with only three full-time members responsible for both MIS and CS concentrations, may negatively affect the effectiveness of the internal moderation mechanism in place, as evidenced by the course files examined during this visit. For example, in Data Structure (CIT213) the moderation of the final examination provided no comments on Q1a 'Find the number of leaves for a Binary tree' that was aligned with CILO A3; although, this learning outcome requires the usage of C++ programming language and its achievement can be properly measured through coding questions/assignments. In Software Engineering (CSC442), the moderation form has not addressed the alignment issue between ILO B12 that requires programme development to be achieved and Q4 of final examination 'explain in details the following testing strategies'. During the follow-up visit, the Panel was informed that neither the Examination Committee nor the Quality Assurance Office (QAO) has a role in monitoring the effectiveness of the moderation process. It is only the responsibility of the HoD to ensure the effectiveness of the entire internal moderation process. The Panel finds this task very challenging for an individual person with extra administrative roles and a heavy teaching workload during the semester. Hence, while the Panel acknowledges the department's efforts in introducing internal pre-assessment moderation, the Panel recommends that the Department should evaluate the effectiveness of its internal moderation process.

Recommendation 3.6: *Develop and implement a procedure for external moderation of the assessment on the BSIT programme and monitor its effectiveness*

Judgement: *Not Addressed*

UCB has an assessment moderation procedure that provides some information and templates required to execute the external moderation process. However, the policy does not stipulate the criteria for selecting external moderators, and the mechanism used to evaluate its effectiveness. In meetings with staff, the Panel learned that the external moderation process will be implemented at the end of the 1st Semester of the

academic year 2017-2018. The Panel was informed that UCB is currently communicating with external moderators in order to begin the process. Hence, the Panel recommends that UCB should expedite the implementation of its external moderation process and revise its documentations to ensure that they provide sufficient information on the selection of external moderators and the implementation process.

Recommendation 3.7: Formally moderate grades, ideally through an external moderation process

Judgement: *Not Addressed*

The progress report states that a practice of double-marking is part of the post-moderation process as indicated in the submitted assessment moderation document. During the follow-up visit, the programme team stated that the double-marking is a simple re-calculation and checking procedure to ensure that all questions are marked and the total mark is correct. The Panel studied the course files submitted during the follow-up visit and found no evidence of practicing a post-moderation process that moderates grades in an effective way as described in the assessment moderation document. Moreover, from interview sessions, the Panel confirmed that the mechanism to conduct and monitor the effectiveness of the post-moderation process is not clear and, as indicated in the previous recommendation, external moderation is not implemented for the BSIT programme yet. Hence, the Panel considers this recommendation not addressed.

Recommendation 3.8: Revise the GPA criterion in light of a benchmarking exercise with reputable international institutions

Judgement: *Partially Addressed*

The progress report states that the Information Technology Department performed an informal benchmarking exercise and found that most institutions indicate a requirement of a CGPA of at least 2.00/4.00 to graduate from similar programmes. The Department has proposed this finding to the UCC, which approved it in April 2016. The decision of the UCC was to begin implementation in the 2nd Semester of the academic year 2016-2017 regardless of the graduates' admission year to the programme. In meetings with staff, the Panel learned that warning letters are still sent only to students with 1.7 CGPA or less, whilst students between GPA 1.7 and 2.00 receive no warning and no actions are taken to identify and support them. The Panel is concerned that this group of students might reach the graduation stage without achieving the required CGPA for graduation (CGPA=2.00). During the follow-up visit, the Panel learned that this group of students could be identified and supported by the academic advisor through the regular reports that are sent to the Department by the registration office. However, there are no formal requirements for such identification and support. The Panel recommends that UCB should revise its process to identify at an early stage students at risk of not graduating due to low CGPA, so as to avoid the

risk of them not fulfilling the graduation requirements. Hence, the Panel considers this recommendation partially addressed

Recommendation 3.9: Develop mechanisms for the internal and external scrutiny of the students assessed work to ensure that the level of graduates' achievement meets programme aims and ILOs

Judgement: *Not Addressed*

The Information Technology Department submitted documents that represent indirect assessment of the PILOs based on alumni, employers, and exit surveys. During the follow-up visit, the Panel learned that UCB conducted these surveys every year since 2015-2016. The Panel was informed that the outcomes of the surveys are shared with the Department and relevance units in order to perform necessary improvements and address identified gaps. The Panel studied the adopted surveys and is concerned that the questions included in them are general for the two specializations and are not mapped to the BSIT PILOs. Moreover, there is no evidence of direct assessment where achievements of ILOs are measured based on students assessed work. In its meetings with the programme team, the Panel was informed that achieving a pass grade in a course is considered as an indicator that the students have achieved all the ILOs related to this course and hence the relevant PILOs. The Panel is of the view that this is a crude way to assess the achievement of the PILOs. Furthermore, with the absence of external moderation of students assessed work and the concerns about the effectiveness of the internal moderation, the Panel is of the view that there is no proper mechanism to ensure that the level of graduates' achievement meets the programme aims and ILOs. Hence, the Panel considers this recommendation not addressed.

4. Indicator 4: Effectiveness of quality management and assurance

This section evaluates the extent to which the BSIT programme of UCB, has addressed the recommendations outlined in the programme review report of February 2013, and not fully addressed during the first follow-up visit of April 2015, under Indicator 4: Effectiveness of quality management and assurance; and as a consequence, provides a judgment regarding the level of implementation of each recommendation for this Indicator as outlined in Appendix 1 of this Report.

Recommendation 4.1: *Develop a quality monitoring process to ensure effective development and consistent implementation of all policies, procedures and regulations.*

Judgement: *Not Addressed*

The progress report indicates that UCB will conduct an internal audit that will monitor and report on the effectiveness of its policies, procedures and regulations and their consistent implementation. The Panel was provided with the 'Internal Audit Policy and Procedure' document and an action plan that covers five months without stating the year. The Panel studied the evidence provided and noted that although the 'Internal Audit Policy and Procedure' document was developed in November 2013, it was still in a draft version and did not include any approvals. The Panel is concerned that this is the status of a number of documents that were submitted by UCB for the purpose of this follow-up visit. Moreover, although the document was developed in November 2013, it is yet to be fully implemented.

From interview sessions, the Panel learned that the internal audit mainly covers the review of the course files and that the audit report for the BSIT programme has just been submitted and is yet to be analysed by the Department and the Quality Assurance and Accreditation Committee. The Panel studied the provided audit report and notes that the report is a checklist verifying the actions taken by the Department without any comments. Moreover, there is also missing information and actions that were not implemented (such as external moderation) without any comment from the auditor. The document also included a checklist of all revisions introduced to CILOs, but again without commenting on the quality of the work. The Panel concludes that the audit is conducted in a way that does not provide any real monitoring process that ensures effective development and consistent implementation of all policies, procedures and regulations. Hence, the Panel considers this recommendation not addressed.

Recommendation 4.2: *Establish a clear, sound and complete QAMS that is implemented, monitored, reviewed, evaluated, and improved continuously and consistently*

Judgement: *Partially Addressed*

UCB has a Quality Manual that was drafted in 2013. However, similar to other submitted documents, it does not include any approval signature. Moreover, it is not clear how this manual feed into the internal audit stipulated in the 'Internal Audit Policy and Procedure' document. Furthermore, from discussions with faculty members and administrative staff, it is not clear how the Quality Manual is integrated in the day-to-day operations of the Department and how it supports the delivery of a solid programme. The Panel noted some implementation of the quality assurance requirements, such as pre- and post-assessment internal moderation and revision of learning outcomes. Nonetheless, the effectiveness of these actions is not yet evidenced and the implementation is not always aligned with the stated policies and procedures, as indicated in different parts of this Report.

During interview sessions, the Panel was informed that the post of the Director of Quality Assurance and Accreditation has been vacant on and off for more than two years. The Institution has recently hired a Director of Quality Assurance and Accreditation, who also assumes the role of VP-academics (September 2017), and as a result there has been some delay in the implementation of the Improvement Plan submitted by the Institution to address BQA's review report recommendations. Therefore, the Panel acknowledges the development of the Quality Manual and recommends that UCB should ensure that the Manual is approved by the concerned body and that its implementation is monitored to ensure consistency and effectiveness. Hence, the recommendation is partially addressed.

Recommendation 4.3 *Develop and implement formal decision-making processes at the departmental and institutional levels related to the conduct, management, review and improvement of the BSIT programme*

Judgement: *Partially Addressed*

The BSIT programme is managed by the Department of Information Technology that has recently employed two of its three faculty members. The HoD, who is the only faculty member who has been with the Department since the last quality review conducted by the BQA in 2013, reports to the VP-academics, who has joined the institution less than three months ago and he also assumes the responsibility of the Director of Quality Assurance and Accreditation. The current HoD was also acting as the VP-academics during the first follow-up visit, which raised the panel's concern, while the post of the Director of Quality Assurance and Accreditation was vacant.

The Panel also studied the committees introduced to support the management of the programme. The Panel is concerned that while there is a line of accountability within the work of the committees, the different roles assumed by the same individuals and the change of line of hierarchy for different people do not allow for the proper flow of information and smooth and transparent decision-making, as illustrated under recommendation 2.1. Moreover, the lines blur between the roles of the Director of QAAC and the VP-academics, which was evidenced from discussions with staff during interview sessions. This is due to the fact that the post of the Director of QAAC has been vacant for a long period of time and the Head of the Information Technology Department was the acting VP-academics. Moreover, these two posts were held by a single employee during the period from 1 September 2016 to 29 June 2017 and then by the current VP, who was employed in September 2017, with no overlap between the two.

During interview sessions, the Panel noted that efforts have been exerted to bring the newly appointed staff up-to-date with the institution's policy and procedure and decision-making mechanisms. The Panel notes that through these efforts, UCB has improved the status of the Information Technology Department within the last three months. Nonetheless, the improvement is so recent that it did not have an evident effect on the decision-making process yet, especially with relation to the conduct, management, review and improvement of the BSIT programme. Hence, the Panel considers the recommendation partially addressed.

Recommendation 4.5: *Develop and implement formal mechanisms for annual internal programme evaluation and consistent implementation of improvement recommendations*

Judgement: *Partially Addressed*

The progress report states that the Department of Information Technology conducts an annual review of the BSIT programme and, as a result, produces an annual programme review report. The Panel was provided with two consecutive annual reports for the academic years 2015-2016 & 2016-2017. The Panel studied the two reports and noted that these include statistics about admission, progression, graduation and employment rates. However, the Panel was not provided with evidence of analysis of these statistics that reflect on how to improve the programme and its delivery. Moreover, there is no reporting on issues raised from the previous year report and their status. The reports also do not analyse what has been achieved in terms of learning outcomes and programme delivery. Furthermore, interviewed staff indicated that the programme annual review provides feedback only on the courses owned by the Department of Information Technology and not on all the courses comprising the BSIT curriculum. The Panel is concerned that this does not provide a comprehensive review of the delivery of the programme, especially that the students take a number of mandatory courses from other departments.

During interview sessions, the Panel enquired about the outcomes of these annual reports and how these are utilised. However, the Panel was not provided with any clear evidence on the utilisation of the outcomes of these reports. This could be due to the fact that there is no clear mechanism to develop an action plan that incorporates findings from different evaluations, monitoring mechanism and tracking systems to improve the programme. Hence, the Panel considers the recommendation partially addressed.

Recommendation 4.6: Develop and implement formal processes for the periodic review of BSIT, that incorporate feedback from internal and external stakeholders, as well as a mechanism for implementing improvements

Judgement: *Not Addressed*

UCB has a 'Programme Review Policy and Procedure' document that was developed in November 2016 and does not include any approval signature. The document stipulates the procedure for the annual review of the programmes offered by the Institution. Although the progress report refers to this document for addressing this recommendation, the document does not clearly state any procedure for the periodic review of the programmes. The periodic review is neither referred to in the Internal Audit Documents, nor in the QA manual. Moreover, interviewed staff members did not have a shared understanding of what comprises a periodic review, what would be the input for and outcomes of such reviews and how the institution would go about developing and implementing a periodic review of the programme. Hence, the Panel considers the recommendation not addressed.

Recommendation 4.7: Develop a formal process/procedure to design, implement, analyse, and evaluate surveys for soliciting feedback from internal and external stakeholders and to ensure that their results are used for programme improvements and made available to relevant stakeholders.

Judgement: *Partially Addressed*

To address this recommendation, UCB has developed a stakeholders' assessment policy, which only provides a diagram indicating the role of the stakeholders' feedback in developing new programmes and reviewing and revising existing ones. Evidence provided indicates that UCB has obtained alumni feedback for the academic year 2016-2017. However, no data is provided on the size of the sample. The Panel was also provided with outcomes of graduates and employers' surveys. However, the Panel is concerned that the limited number of responses from employers (5 only) and the low number of graduates every year raises a concern about the statistical validity of these outcomes. During interview sessions, the Panel was informed that the Institution faces a challenge in maintaining high responses to its surveys. The Panel recommends that, in light with the low number of graduates from the programme and the low employability rates of these graduates, UCB should investigate other methods to collect feedback from its external stakeholders.

Upon the request of the Panel, the Institution submitted an action plan that was drafted for the academic years 2017-2018 to 2019-2020 based on the outcomes of the surveys conducted for alumni, employers, and graduates. The Panel studied the document and noted that almost all proposed actions are supposed to take place after this visit. Moreover, the Panel noted that the proposed actions are not detailed sufficiently and that the person/persons accountable for the deliverables are not stated. In addition, the estimated cost is not stated clearly. Hence, the Panel considers the recommendation partially addressed.

5. Conclusion

Taking into account the institution's own progress report, the evidence gathered from the interviews and documentation made available during the second follow-up visit, the Panel draws the following conclusion in accordance with the DHR/BQA Follow-up Visits of Academic Programme Reviews Procedure:

The Bachelor of Science in Information Technology offered by University College of Bahrain has made Inadequate Progress.

Appendix 1: Judgement per recommendation.

Judgement	Standard
Fully Addressed	The institution has demonstrated marked progress in addressing the recommendation. The actions taken by the programme team have led to significant improvements in the identified aspect and, as a consequence, in meeting the Indicator's requirements.
Partially Addressed	The institution has taken positive actions to address the recommendation. There is evidence that these actions have produced improvements and that these improvements are sustainable. The actions taken are having a positive, yet limited impact on the ability of the programme to meet the Indicator's requirements.
Not Addressed	The institution has not taken appropriate actions to address the recommendation and/or actions taken have little or no impact on the quality of the programme delivery and the academic standards. Weaknesses persist in relation to this recommendation.

Appendix 2: Overall Judgement.

Overall Judgement	Standard
Good progress	The institution has fully addressed the majority of the recommendations contained in the review report, and/or previous follow-up report, these include recommendations that have most impact on the quality of the programme, its delivery and academic standards. The remaining recommendations are partially addressed. No further follow-up visit is required.
Adequate progress	The institution has at least partially addressed most of the recommendations contained in the review report and/or previous follow-up report, including those that have major impact on the quality of the programme, its delivery and academic standards. There is a number of recommendations that have been fully addressed and there is evidence that the institution can maintain the progress achieved. No further follow-up visit is required.
Inadequate progress	The institution has made little or no progress in addressing a significant number of the recommendations contained in the review report and/or previous follow-up report, especially those that have main impact on the quality of the programme, its delivery and academic standards. For first follow-up visits, a second follow-up visit is required,