National Authority for Qualifications &
Quality Assurance of Education & Training

Directorate of Higher Education Reviews

Programme Follow-Up Visit Report

Bachelor of Science in Information Technology

University College of Bahrain

Kingdom of Bahrain

First Follow-up Visit Date: 20 April 2015
Review Date: 3-4 February 2013
HC058-C2-F001

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1.   The Programme Follow- up Visit Overview

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

The 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'.

This follow-up visit Report is a key component of this programme review follow-up process, whereby the Bachelor of Science in Information Technology (BSIT), at the University College of Bahrain (UCB) in the Kingdom of Bahrain was revisited on 20 April 2015 to assess its progress, in line with the published review Framework and the QQA regulations.

The subsequent sections of this Report have been compiled as part of Phase 2 of the DHR/QQA's programme follow-up cycle highlighted in the DHR Programme Review Handbook, and associated with the on-going process of institutional and academic quality and enhancement reviews of Higher Education Institutions located in the Kingdom of Bahrain.

1.1.   Aims of the Follow-up Visit

(i)   Assess the progress made against the recommendations highlighted in the review report (in accordance with the four QQA Indicators) of UCB's BSIT since the programme was reviewed on 3-4 February 2013.

(ii)   Provide further information and support for the continuous improvement of academic standards and quality enhancement of higher education provision, specifically within the BSIT programme at UCB, and for higher education provision within the Kingdom of Bahrain, as a whole.

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1.2. Background

The programme review of the BSIT programme, at the UCB in the Kingdom of Bahrain was conducted by the DHR of the QQA on 3-4 February 2013.

The overall judgement of the review panel for the BSIT programme, of the UCB was that of **'limited confidence'**. Consequently, the follow-up process incorporated the review of the evidence presented by UCB to the DHR, the improvement plan, the progress report and its supporting materials, and the documents submitted during the follow-up site visit and those extracted from the interview sessions.

The external review panel's judgement on the UCB's BSIT programme 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'**

The follow-up visit was conducted by a Panel consisting of two members. This follow-up visit focused on assessing how the institution addressed the recommendations of the report of the review conducted on 3-4 February 2013. For each recommendation given under the four Indicators, the Panel judged whether the recommendation is 'fully addressed', 'partially addressed', or 'not addressed' using the rubric in Appendix 1. An overall judgement of 'good progress', 'adequate progress' or 'inadequate progress' is given based on the rubric provided in Appendix 2.

1.3. Overview of the Bachelor of Science in Information Technology

UCB was established in the year 2001. The Department of Information Technology offers one programme, namely the Bachelor of Science in Information Technology. The Department has one full-time faculty member who is also the Head of Department (HoD), and a part-time faculty member. At the time of the follow-up visit, the Department had 23 students registered in the programme. The BSIT programme is designed with two concentrations. The Management of Information Systems (MIS) concentration that combines skills and knowledge on both IT and business administrations, whereas the Computer Science (CS) concentration is a typical IT and technical track. 20 students are registered in the MIS concentration, while three are registered within the CS concentration. Students are required to complete 122 credits to graduate, of which 32 credits are university requirements, 60 credits are department requirements, and 30 credits are concentration requirements. All students are required to complete an internship programme and a graduation project before they become eligible to graduate.

2.   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, 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 1.1: *Give more emphasis to the practical aspects in the programme, specifically laboratory-based teaching and learning*

Judgement: *Fully Addressed*

The Department identified one credit hour for laboratory-based teaching courses that is equivalent to two contact hours/week allocated for the practical sessions as stated in the academic planning framework. The action was proposed by the Department Council, approved by the University Council, and implemented since the first semester of the 2013-2014 academic year. This action has also been reported by the external examiner to improve students' practical skills. The Panel toured the facility and noted that there are adequate resources and support for the laboratory-based teaching courses because of the relatively small number of students in the BSIT programme (23 students). Furthermore, interviewed students were satisfied with the department's action to increase the practical sessions in order to improve their skills-based learning outcomes. In addition, the Department has enriched the curriculum with multiple industrial visits to expose students to more advanced aspects of information technology. The Panel is satisfied with the progress achieved in addressing the need to strengthen emphases on the laboratory-based teaching and learning courses.

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

Judgement: *Not Addressed*

The Institution conducted two workshops, namely: 'Teaching and Learning' and 'Programme ILOs and Course ILOs', to enhance the level of understanding of UCB staff with regards to learning outcomes. During interviews with the faculty, the Panel learned that all faculty members attended these workshops including part-time faculty. Furthermore, the Institution consulted an external examiner to review the BSIT programme. The external examiner reviewed the programme intended learning outcomes (ILOs) and provided recommendations to improve the programme ILOs. The Department has implemented some of these

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recommendations since the first semester of the academic year 2014-2015. The Panel studied the recommendations of the external examiner and noted that these are mostly directed toward improving the programme ILOs related to Computer Science concentration. The Department needs to ensure that the ILOs of the two concentrations of the programme (CS and MIS) are revised properly.

The Panel scrutinized all provided course files for the BSIT programme, and studied the course specifications. The Panel is concerned with the relevance of some courses' learning outcomes to the course nature and content. For example, some courses like CSC325 'Introduction to Linux' is a platform-specific course that has limited content to enable the achievement of the skills such as analysing problems and critical thinking. The course Calculus I has no content or assessment methods to support students on achieving the stated ILO C4 'The ability to design & implement computer programs to …'. The course STS102 is a basic introduction to statistics and it is not clear how the students will achieve the learning outcome stated in ILO B6 'The ability to construct and develop a logical arguments …', and B4 'effective analytical & critical thinking skills …'. In STS 201, the ILO B3 'The ability to apply Information Technology, Computer Science & Management Information Systems concepts and theories to the solution of problems' is not related to statistics and cannot be achieved through this course. The Department needs to revise the course learning outcomes and benchmark it with similar programmes locally, regionally, and internationally.

The Panel studied the mapping of the course ILOs to the programme ILOs, and noted that the Department mapped the internship and senior project courses. However, the Department needs to revisit the mapping after revising the abovementioned deficiencies in the course ILOs to eliminate the irrelevant mapping of some courses to the programme ILOs. The Panel learned during interviews with faculty members that the Business Courses are not mapped to the BSIT programme ILOs. This needs to be addressed to ensure achievement of the Business-based ILOs; in particular for the MIS concentration.

Recommendation 1.3: *Ensure that the documented teaching methods in the course specifications support the attainment of the course ILOs adequately*

Judgement: *Fully Addressed*

The Department introduced a variety of teaching methods that were documented in the course specifications and files. During interviews with the faculty, the Panel learned that teaching methods are proposed by the course lecturer and validated by another lecturer to ensure that the introduced teaching methods are appropriate to attain the course ILOs. The Panel studied the mapping of teaching methods to the course ILOs, and found that they are in general aligned to the course ILOs.

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Nonetheless, the Panel noted excessive usage of some teaching methods. For example, the peer learning and self-learning through video lectures and online discussions are mapped to almost all course ILOs within each course, yet there is no evidence of fully utilizing these teaching methods. Interviewed students were satisfied with the variety of teaching methods in particular the focus on skills based techniques, such as independent learning through group projects and home assignments. Students were satisfied with the new methods of learning that helped to improve their practical skills and challenged their thinking; in particular the increase in the number of assignments. However, interviewed students did not report of any experience in relation to learning through video lectures and online discussions. The programme would further benefit from the effective implementation of the teaching methods indicated in the course specifications.

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

Judgement: *Partially Addressed*

The Institution developed an assessment policy recently. The policy includes a higher-level assessment strategy, describes the assessment schemes within the Institution and addresses the usage of summative and formative assessment methods. The policy was developed to encourage fairness and consistency through internal and external moderations. Students can also challenge their grades through an appeal process. In a meeting with the faculty, it was evident that they are aware of the assessment policy, its content and the role the policy plays in assessing students' achievement. During interviews with students, the Panel found that they are also aware of the current assessment methods used in the programme and their implications. However, the Panel is concerned with the nonexistence of some components such as a policy on plagiarism and cheating (except the part mentioned in the student handbook), a policy that defines assessment design, security of assessment records, documents' retention period, marking of assessments and approval of assessments results. The Panel recommends that the Institution develop these policies.

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3.   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, under Indicator 2: Efficiency of the 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 2.1: *Implement clear lines of accountability with regard to the management of the programme*

Judgement: *Not Addressed*

The submitted UCB organization chart shows that the IT Head of Department (HoD) is responsible for the management of the BSIT programme. The HoD should report to the Vice President (VP) Academics and Quality Assurance Affairs who reports to the President. The HoD is responsible for the development of the Department in regards to the academic programmes, curricula, academic personnel, student body, and physical facilities. At the time of the review site visit (3-4 February 2013), there were three academic staff, one of which was acting as the VP Academics and the HoD. At the time of this follow-up visit, however, the number of academic staff in the IT Department was reduced to two (one full-time and one part-time). Moreover, the position of the VP Academics was vacant for more than one year, and the HoD was reporting directly to the President. Almost all committees (such as quality assurance committee, strategic planning committee, examination committee, etc.,) are on an institutional level and the HoD, being the only full-time faculty member, represents the Department in almost all these committees. This is in addition to being the main instructor responsible for the delivery of the programme. Moreover, the Panel was provided with evidence indicating a request sent to the HEC to consider the IT HoD to an additional post of the VP Academics. This seriously influences the effectiveness of the way the programme is managed. The Panel also noted the contentious instability in occupying the position of the VP Academics and Quality Assurance Affairs, which might have a negative impact on maintaining an effective programme management.

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

Judgement: *Not Addressed*

As stated above, at the time of the previous site visit (3-4 February 2013), there were three faculty members within the Department of IT. This has reduced to two faculty members at the time of the follow-up visit. The Panel noted that the academic

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specialization of these two faculty members is not sufficient to match the BSIT programme aims and curriculum content, especially for the MIS concentration (in which 20 out of the 23 students were enrolled at the time of this follow-up visit). The improvement plan had indicated that the institution will develop a three year plan to address these shortages, however; the number of faculty members and differentiation in their specialization was even less at the time of the follow-up visit. In a number of interview sessions, the Panel was informed that the institution is not planning to increase the number of the faculty members unless the number of students' enrolment increases. The Panel noted that the staff teaching contact hours for this and the last three semesters fall between 12 and 18 hours for the full-time faculty member who is the HoD and the academic and project advisor for all the students, and between 8 and 20 hours for the part-time faculty member which is considered high by all measures. The Panel was also informed by interviewed students that they face the problem of the courses not being offered regularly enough to enable them to finish their studies in an appropriate time. With a low number of enrolment, the Panel is of the view that using the student-to-staff ratio as the only factor for expanding and recruiting faculty members might hinder the quality of the programme delivery as faculty members are overloaded with teaching and admin responsibilities and teach outside their specialization. This, in turn will affect the learning experience of the students. The Panel recommends that UCB explore ways to recruit more faculty members in line with best practice for IT programmes, to ensure that the faculty members are adequate in number and in academic specialization.

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: *Partially Addressed*

UCB utilises the LOGSIS information system to generate reports on students and staff information, laboratories and lecture rooms, examinations timetables and offered courses and sections. Moreover, the Institution has started to report on the library usage. This, the Panel was informed, is conducted manually as the librarian keeps manual track of the students' usage of the library. The Panel is concerned that this is not a rigours way to track the library usage. The Panel studied the samples of reports provided and noted that these detail the purpose of the library visit which the Panel was informed the librarian accumulates through asking individual visitors why they are using the library. Moreover, the report does not clearly provide information on the usage of the e-learning, and e-resources offered. The Panel recommends that UCB continue reviewing its resource tracking system to evaluate

the actual usage of its resources and provide rigour information for decision-making on better utilization of the resources.

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

Judgement: *Not Addressed*

At-risk students are identified by the registrar office once their GPA is lower than 1.7 where these students are given warning letters. The Panel noted that it is only when the student receives his/her fifth probation that the Institution might consider dismissing him/her. To address this recommendation, the Department has started tracking students' performance after the second midterm examination and evidence was provided on meetings conducted with those struggling with their courses. This was done by the HoD who is the academic advisor of all the 23 students. The Panel noted, however, that these activities are not translated into a systematic method used to identify and support at-risk students. Moreover, meetings with at-risk students did not result in action plans on how these students can improve their performance further or what support, academic and non-academic, can be provided to them. Moreover, the Panel noted that warning letters are sent to students once their accumulative GPA is below 1.7. The Panel recommends that with the graduation requirement being adjusted such that students should accumulate at least 2.0 GPA to graduate, the warning letter should be sent to the students once their GPA goes below 2.0. In addition, the Panel recommends that UCB formalize the intervention mechanisms and support provided for students at risk of academic failure.

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4.   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, 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 3.1: *Evaluate the appropriateness of assessment methods, especially for skills-based ILOs, and revise them where needed*

Judgement: *Fully Addressed*

The Panel is satisfied with the provided samples of students' assessed work presented during the follow-up visit. The Panel found the level of assessments is appropriate to the type of programme. During the follow-up visit, the Panel examined samples of final examination and other students assessed work for different courses in particular laboratory-teaching based courses such as CSC101, CSC102, CIT262, CIT318, CIT321, and CIT402. The Panel found examples of higher level of thinking that involve real life problems scenarios in the given assignments, and analysis and critical thinking in the examinations of these courses. The Panel found the level of difficulty in the examinations contained in the course files is acceptable and aligned to the typical level expected in similar programmes. Furthermore, the Panel appreciates the department's efforts in seeking advice from an external examiner on key aspects of the BSIT programme. The Panel encourages the Institution to develop and implement a clear action plan with regard to the external examiner reports to address all the given recommendations and suggestions.

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

Judgement: *Partially Addressed*

The evidence made available to the Panel on the benchmarking policy suggests that the policy is a general overarching one and is not translated to a clear procedure. There is evidence of two different benchmarking activities conducted, one for the course matching and one for the accumulative GPA. However, it is not clear why UCB has used different institutions for the two benchmarking activities. Moreover, it is not clear why benchmarking activities were limited to these two aspects although the definition used in the policy identifies benchmarking to be much more than that. There was no written evidence presented to the Panel to indicate that a similar benchmarking process was conducted on a formal and periodic approach; rather discussions during interview sessions indicated that a comparison of alignment and

weighting of the overall programme has been performed by the HoD individually. Benchmarking cannot be restricted only to comparison or the adoption of programme content and ILOs of other institutions. The Panel found no evidence of a formal periodic process for benchmarking is carried out and that the findings are used to improve the programme. The Panel recommends that the Institution develop a detailed procedure on how benchmarking will be executed and how the outcomes of these benchmarking activities are to be utilised.

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

Judgement: *Not Addressed*

There is evidence from provided documentations and the interviews conducted that assessment policy and procedures are partially implemented. There is evidence of implementation of internal moderation, and that students grade distribution is measured and approved by the HoD and the University College Council before it is published to students. During interviews with students, the Panel learned that they are satisfied with the implemented appeal mechanism. Notwithstanding the above, the submitted assessment policy document has no specific policy or procedure on what is defined as plagiarism, how to avoid plagiarism and the consequences of such act. Moreover, there is no evidence of formal training or awareness programmes for students to build an anti-plagiarism culture in the Department. The only evidence provided is a small section about the concept of plagiarism in the Student Handbook, and the 'Grammarly' software that is used to detect plagiarised materials. In addition, the Panel found no evidence of systematic implementation of external moderation or assessments schema, and there is no evidence of informative feedback provided to students on the examination papers. During interviews with the Examination Committee and from the submitted minutes of meetings, the Panel found no evidence that the assessment policy is monitored or subject to regular reviews. While the submitted progress report suggests that assessment policies and procedures are consistently applied and monitored through the Examination Committee, there was no evidence of the Committee's role with regards to monitoring the implementation of the assessment policy to identify whether the staff are appropriately and consistently applying the range of assessment across all courses in the BSIT programme.

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

Judgement: *Partially Addressed*

The recently developed assessment policy identifies the different assessment methods suitable for assessing different types of learning outcomes. In addition, Course Specifications identify the assessment tools used when assessing different course learning outcome. However, these are not directly linked and it is unclear what process is used for the alignment or how results are reported, evaluated and actions are taken. It is stated in the submitted progress report that internal and external moderation are utilised to ensure alignment of assessment to the programme ILOs. During the follow-up visit, the Panel scrutinized the internal moderation forms to identify the mechanism used to ensure alignment of assessment tools with course ILOs. Despite that the assessment policy provides the mechanism to align the ILOs to the assessments within the BSIT programme, the Panel found this process of assessment alignment with the ILOs is not effective. This is mainly due to the limited number of staff and as a results in scrutiny of alignment is either executed by the HoD, or the part-time staff, or a faculty member with no or limited IT background from another department. There are some course files in the academic year 2013-2014, which have internal moderation forms, that were performed by faculty members with background other than IT, for example, CIT318, CIT231 and CIT325. During interviews, it was explained that this has changed since the academic year 2014-2015, and only the IT department's faculty members are allowed to scrutinise the alignment. The Panel is still concerned that the HoD is the only full-time faculty involved in ensuring the quality of assessment and its alignment to the ILOs. A greater range of subject expertise is required than one person could possess. For example, in CIT213 'Data Structure', question (2) of the final examination in the 2014-2015 academic year, has been over mapped to the course ILOs, although it is a simple graph analysis question that cannot achieve the course ILO 'Design and implementation of computer programmes'. The Panel recommends that the Department revise the practical aspects of implementing the institution's policies and procedures with regard to the alignment of assessment to learning outcomes to ensure their effectiveness.

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

Judgement: *Partially Addressed*

UCB has developed two moderation processes that are used; namely internal and external moderation. During interviews faculty members explained that the pre-assessment internal moderation is used to ensure alignment to course ILOs, coverage

of course content, examination time appropriateness and marks allocation. This is performed by the Department and monitored by the Examination Committee who manages and approves the results of the pre-assessment moderation process. Furthermore, interviewed faculty members described the post-assessment internal moderation as a process to ensure that all questions are marked and the total mark is correct. The faculty confirmed that internal moderation covers written examinations only and does not cover other assessment instruments such as assignments and projects. During the follow-up visit, the Panel examined the internal moderation forms provided in the course files. The Panel is concerned about the effectiveness of this process because there are only two faculty members (the HoD and a part-timer) with IT background to perform the moderation in an effective way. The Panel noted cases of inappropriate alignments between assessments and course ILOs that the internal moderation did not detect. The Panel is also concerned about the value of the received comments and recommendations from the moderator because of the faculty size and the range of expertise needed to address the MIS and CS concentrations with different specializations in IT. The Panel recommends that the Department ensure that there are enough resources to enable effective internal moderation.

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

Judgement: *Partially Addressed*

The Institution has conducted some external moderation activities for the BSIT programme. However, there is no formal external moderation procedure in place. During interviews, the Panel learned that the Examination Committee has limited role in managing external moderation of assessments conducted for the courses of the BSIT programme, whereas the Department has the responsibility of selecting the external moderator and managing the process. The Panel is concerned that this may impact the effectiveness of the external moderation process and lower its value, especially with the Department consisting of one full-time faculty member only who is also the HoD. This is a critical shortcoming particularly for the benchmarking of academic standards against other institutions, which is the prime purpose of the external moderation practice. The Panel was provided with evidence of one external examiner reviewing a sample of students assessed work. The examiner provided general feedback about all courses. The Panel is of the view that the Department needs to appoint more than one external examiner to moderate different courses within the range of concentrations/specializations within the programme. Moreover, the Department needs to develop a proper mechanism that moderates course assessments externally and ensure that students' achievement is at an equivalent

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level with graduates from similar programme offered by local, regional and international institutions.

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

Judgement: *Not Addressed*

The submitted progress report states that a practice of double marking is introduced. However, it is not clear who does the double marking, and what is the role of the external moderator in moderating the grades. During the follow-up visit, the programme team indicated that the double marking is part of the post-assessment internal moderation process. When meeting with the faculty, the Panel learned that the post-assessment moderation is just a simple re-calculation and checking procedure to ensure that all questions are marked and the total mark is correct, and there is no process for moderating the grades through an external moderator to ensure achieving the programme academic standards. This needs to be addressed.

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

Judgement: *Partially Addressed*

The Panel studied the conducted benchmarking exercise performed by the Department in order to benchmark the GPA criterion against other institutions. The findings of this benchmarking exercise from most of these institutions indicate a requirement of a GPA of at least 2.00/4.00 to graduate from similar programmes. The Department has proposed this finding to the University College Council (UCC) for approval, and started the implementation for the students admitted to the programme from the academic year 2013-2014. However, there is no evidence of the impact of these changes on students achievements, because there are no graduates yet with this criterion as reported by the Head of Admission and Registration. The Panel also noted that interviewed students were not aware of the new GPA criterion though it applies to some of them, and that the Student Handbook and the provided warning letters are still showing the previous GPA criterion. The Panel recommends that the Institution revise its documents to reflect such change and that the Department ensure that students are informed about the graduation GPA requirements.

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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*

As stated earlier, the Department has developed some forms of internal and external moderation. However, there is no evidence of these activities ensuring the level of graduates' achievements. This could be due to the lack of effective post-assessment internal moderation process that scrutinizes students assessed work to ensure that students' achievements meet the BSIT programme ILOs. Furthermore, the Panel is concerned that there is no active process to externally moderate students assessed work and ensure that the level of achievement for the graduates of the BSIT programme is aligned to the programme ILOs and aims and accepted at regional and international levels. Moreover, the Panel noted that the role of the Examination Committee is not very significant on governing, monitoring and managing the moderation of the examinations to ensure effective moderation processes.

Recommendation 3.10: *Develop policies and procedures for conducting, supervising, and monitoring the graduation project, including formal criteria for evaluating projects*

Judgement: *Fully Addressed*

The Institution developed a Graduate Project Handbook, which was approved by the UCC on 20 May 2013. The Handbook stipulates guidelines for undergraduate projects, generic aims for the projects and a clear statement on the roles and responsibilities of the supervisor, the student, and the examiners. It also includes useful information detailing the process from the time students register for the graduation project to the examination of the project. It also includes the requirements for completing the project. Students are required to submit a project report and undergo an oral examination. A standard marking schema for both the project report and the oral examination are included in the guidelines. Two examiners, individually assess the project and its associated oral examination. During interviews the faculty explained that students are requested to submit their report through the 'Grammarly' software to ensure there are no plagiarised materials, yet this has to be emphasized in the Handbook as well. Despite the absence of a formal policy on plagiarism, the Panel learned from the faculty that students are warned in case of any plagiarised materials being found, and often are given another chance to rewrite their work. Students, however, confirmed that it is up to the lecturer to decide on the action against plagiarism. During the interview sessions, students indicated their

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satisfaction with the available time to meet their supervisor on regular basis and discuss their project's progress. Based upon scrutiny of the provided samples of students projects, it was noted that the same faculty supervises all projects (i.e. the HoD), which are all examined by the part-time faculty member. This was confirmed by interviewed students. Furthermore, there is no external moderation or examiner to ensure the students' achievements is aligned to the programme aims, and meet the ILOs. The Panel suggests the inclusion of external examiner to advance the level of the project and enrich the outcomes.

Recommendation 3.11: *Include appropriate personnel such as one or more IT experts and student alumni on the recently established university advisory board*

Judgement: *Fully Addressed*

A Programme Advisory Board (PAB) was established in January 2015, with more experts that can enrich the BSIT programme with valuable feedback. The Board was approved by the UCC, and conducted its first meeting in February 2015. According to the programme team, the PAB has suggested some additional courses to enrich the BSIT curriculum and meet the needs of Bahrain labour market. For examples, the PAB suggested more focus on information security courses and data mining/big data courses. The Panel encourages the Department to develop a mechanism to include the Board members' feedback when reviewing the BSIT programme.

5.   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, 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*

To ensure the effective development and consistent implementation of its policies, UCB has developed four documents on quality system procedures. These are titled 'Document Control', 'Internal Auditing', 'Corrective and Preventive Action', and 'Control of Non-conforming Service / Product'. However, no evidence was provided to the Panel on the implementation of these policies. During interview sessions, the Panel was informed that the Institution is scheduled to start its internal audits from June 2015. The Panel recommends that UCB expedite the implementation of its internal audit policies to ensure the effective and consistent implementation of all policies, procedures and regulations.

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 developed an Academic Quality Manual. However, the document does not indicate any evidence of approval or date of implementation. The Quality Manual indicates that general processes at UCB follow the ADRI Approach (Approach, Deployment, Result, and Improvement) and is based on the ISO 9001:2008 standards. The scope of the Manual covers the various academic and support processes adopted by UCB. However, the Panel was not provided with any formal evidence on the implementation of this manual or a formal plan with clear timeline for future implantation. Moreover, the Panel noted with concern that since the last review, the position of the VP Academics and Quality Assurance Affairs has been filled for around a year only, after which the position was vacant to be filled again with a senior staff responsible for QA only. This continued for a short period of time after

which the position stayed vacant until the time of the follow-up visit. The Panel is concerned that such discontinuity and void would hinder the timely implementation of many of the policies and procedures relevant to the QA system of the UCB. The Panel urges the Institution to fill this vacancy and ensure the retention of its senior staff members to ensure continuity in the development and implementation of its processes.

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: *Not Addressed*

The progress report refers to a number of policies and procedures that have been developed to govern and manage the different aspects of the BSIT programme; such as developing and reviewing the programme, its courses, admission and registration, and assessment. These policies are included in the Academic Quality Manual and stipulate the purpose, scope, definitions, responsibilities, forms/templates used, and records generated. However with the position of the VP Academics and Quality Assurance Affairs being vacant for almost one academic year and the very limited size of the Department (1 full-time, who is also the HoD, and 1 part-time), it is not clear how decision making is achieved effectively at both a department and institution level. The Panel urges the institution to fill the vacant levels, especially at high management levels, to ensure the proper implementation of its decision-making processes.

Recommendation 4.4: *Develop and implement policies and procedures for the development of new programmes to ensure that they are relevant to the labour market needs*

Judgement: *Fully Addressed*

 UCB has developed a policy on the design and development of new programmes which is stated in the Academic Quality Manual. This has been translated into a procedure on the Development of New Programmes of Study. The procedure stipulates the main input needed, including the feasibility study, the steps for the design and development and approval of the newly proposed programme, the outcome of the different stages and the responsibilities and authorities within each stage. However, the policy has not been implemented as no new programme has been suggested within the Department. The Panel is satisfied that the policy is suitable for the purpose of developing new programmes.

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

Judgement: *Partially Addressed*

The Academic Quality Manual indicates that an annual programme review is conducted 'for each academic programme offered by the University'. A Programme Annual Quality Review procedure was developed in November 2013 and as a result, an annual review of the BSIT programme was conducted for the academic year 2013-2014. The outcome of this review has been utilised to develop an Academic Planning Framework for the BSIT programme for the period 2014-2019. The document was developed and approved in February 2015. The Panel studied the documents provided and noted that there is a misunderstanding between the two functions of annual programme evaluations and periodic programme reviews. This was confirmed during interview sessions. The Panel recommends that the Institution develop and implement an annual evaluation process for the programme to ensure contentious improvement of the programme.

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: *Partially Addressed*

As stated above, the Panel noted a misunderstanding of the different functions of annual and period reviews of the programme. The progress report clearly indicates that the two functions are understood and executed as one function with the annual review dragging its outcomes to be addressed through a five-year plan as stated under the recommendation above. The Panel recommends that the Institution revise its Programme Annual Quality Review procedure and develop two separate procedures; one addressing the annual programme evaluation that might lead to minor amendments of the programme to ensure its quality and currency, and a separate procedure for conducting a comprehensive periodic review of the programme that might lead to major changes of the programme if needed. This review would benefit from using a wide range of inputs both external and internal.

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Recommendation 4.7: *Develop a formal process/procedure to design, implement, analyze, 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*

UCB has revised its surveys and has developed, in November 2013, five new questionnaires covering all major stakeholders which are: Students, prospective graduates, alumni, employers and UCB employees. However, the Panel was not provided with any evidence of implementation. Moreover, during interview sessions it was not clear what is the institution's approach to informing stakeholders about the outcome of these surveys and the decision taken as a result of these outcomes. The Panel recommends that the Institution expedite the implementation of its questionnaires and formalize the process for analysing and evaluating the outcome of these surveys and providing stakeholders with feedback about their outcomes.

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6. Conclusion

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

The Bachelor of Science in Information Technology programme offered by the University College of Bahrain has made 'inadequate progress' and as a result, the programme will be subjected to a second follow-up visit.

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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,

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