



هيئة جودة التعليم والتدريب

Education & Training Quality Authority

KINGDOM OF BAHRAIN مملكة البحرين

Directorate of Higher Education Reviews Follow-up Review Report

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

Follow-up Visit Date: 29 January 2025

Review Date: 15 – 16 February 2021

HF001-C3-F001

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Acronyms

BIT	Bachelor of Science in Information Technology
BQA	Education & Training Quality Authority
CS	Computer Science
DHR	Directorate of Higher Education Reviews
IAB	Industry Advisory Borad
IT	Information Technology
PEO	Programme Educational Objective
PILO	Programme Intended Learning Outcome
MIS	Management Information System
UCB	University College of Bahrain

I. Introduction

The follow-up visits are part of a cycle of continuous quality assurance review and reporting on improvement conducted by the Directorate of Higher Education Reviews (DHR) of the Education & Training Quality Authority (BQA) in the Kingdom of Bahrain. The follow-up visits apply to all academic programmes that have been reviewed using the Academic Programme Reviews Framework (Cycle 2) and received a 'No Confidence' judgement.

The review of the Bachelor of Science in Information Technology (BIT) programme was conducted by the DHR on 15-16 February 2021 and the Review Report was published on 13 October 2021. The judgement of the Bachelor of Science in Information Technology programme for each Standard is as follows:

Standard 1: The Learning Programme; Not Satisfied

Standard 2: Efficiency of the Programme; Not Satisfied

Standard 3: Academic Standards of Students and Graduates; Not Satisfied

Standard 4: Effectiveness of Quality Management and Assurance; Not Satisfied

The follow-up visit for the Bachelor of Science in Information Technology programme focused on assessing how the University College of Bahrain (UCB) addressed the recommendations within all the four Standards.

The follow-up process incorporated the review of the evidence presented by UCB to the DHR. The evidence base comprises the programme's improvement plan, progress report and supporting materials submitted to BQA by UCB to report on its progress to-date in addressing the recommendations stated in the programme Review Report.

For each recommendation given under the four Standards, the Panel judged whether the recommendation is 'Fully Addressed', 'Partially Addressed' or 'Not Addressed' using the Rubric in Appendix (A). Based on this, a judgement of 'Good Progress', 'Adequate Progress', or 'Inadequate Progress' is given to each Standard using the rubric in Appendix (B).

II. Standards and Indicators

Standard 1

The Learning Programme

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

Recommendation 1: Incorporate the development of entrepreneurial skills into the programme.

Judgement: *Partially Addressed*

The Panel observed that the Information Technology (IT) Department has introduced entrepreneurship as an elective course in the computer science and management information system concentrations. However, the course syllabus does not adequately incorporate IT-specific aspects in its description, learning outcomes, or topic coverage. Furthermore, the sample projects completed by IT students in the Entrepreneurship course, as well as the courses presented to the Panel, which could include entrepreneurship elements, do not demonstrate IT-driven entrepreneurial themes. Therefore, the Panel is of the view that more efforts need to be made to fully address the review recommendation.

Recommendation 2: Review the PILOs / programme aims mapping and ensure that this process is embedded in the programme development and review.

Judgement: *Fully Addressed*

Recommendation 3: Use benchmarking more rigorously to refine the PILOs.

Judgement: *Partially Addressed*

From review of the relevant documentation, the Panel noted the benchmarking with local and international institutions covering Programme Educational Objectives (PEOs), Programme Intended Learning Outcomes (PILOs), programme structures, and courses. However, a rigorous gap analysis of the PEOs and PILOs should have been conducted as part of the benchmarking process to effectively address the recommendation.

Recommendation 4: Revise all course specifications to ensure that the CILOs are measurable and meaningful and that the CILOs refer to the relevant NQF descriptor and level.

Judgement: *Fully Addressed*

Recommendation 5: Perform a more rigorous benchmark to support the update of curriculum on IT.

Judgement: *Partially Addressed*

As noted by the Panel in other sections of this Report, UCB needs to undertake a more rigorous benchmarking process for certain aspects to better support updates to the curriculum, particularly concerning PEOs and PILOs. Furthermore, the Panel believes that UCB would benefit by refining its selection of institutions used for benchmarking the IT programme. This selection should align with UCB's mission and vision, consider its student population, and take into account the range of academic programmes it offers.

Recommendation 6: Review the amount and level of practical work included in BIT and embed a process to regularly review the balance between theory and practice in the programme.

Judgement: *Not Addressed*

In both the Computer Science (CS) and Management Information Systems (MIS) concentrations within the IT programme, the Panel observed a limited proportion of practical work compared to theoretical content, with practical components comprising only 20% in MIS and 31% in CS. This imbalance is further highlighted in the supplementary documentation provided to the Panel, where assignments in certain courses, such as CIT350 (e.g., tasks involving wireframes for app development) and CIT432 (e.g., questions on the pillars of Bahrain National Security Strategy), are predominantly theory-based rather than practical.

Additionally, the Panel noted the absence of a structured and systematic process for regularly reviewing and adjusting the balance between theoretical and practical components. This gap is not addressed in the supporting documentation or any additional evidence. Therefore, the Panel concludes that UCB has not taken sufficient measures to adequately address the recommendation.

Recommendation 7: Regularly review textbooks and references for currency.

Judgement: *Fully Addressed*

Recommendation 8: Monitor and evaluate teaching and learning in line with the UCB Policy and Department Philosophy.

Judgement: *Not Addressed*

During the follow-up visit interviews, the Panel was informed that measures have been initiated to ensure the proper implementation of teaching, learning, and assessment policies, primarily through plans to increase the number of external moderators. However, the Panel is of the view that the effectiveness of internal moderation, as well as other processes used for

monitoring and evaluating teaching and learning, requires regular review to comprehensively address the recommendation.

Recommendation 9: Review the Learning, Teaching and Enhancement Policy to include e-learning to be in line with teaching on BIT.

Judgement: *Fully Addressed*

Recommendation 10: Embed formally Research methods as part of the programme to support students' learning generally and for the Graduation Project in particular.

Judgement: *Fully Addressed*

Recommendation 11: Include Ethics of Research in a compulsory course content on BIT.

Judgement: *Fully Addressed*

Recommendation 12: Review implementation of the Assessment Policy to ensure that the policy is implemented consistently and rigorously.

Judgement: *Not Addressed*

As noted, earlier in this Report, UCB is planning to increase the number of external moderators to ensure the proper implementation of teaching, learning, and assessment policies. The Panel is of the view that UCB should regularly evaluate the effectiveness of the internal moderation, as well as other processes used for monitoring and evaluating teaching and learning, to comprehensively address the recommendation.

Standard 2

Efficiency of the Programme

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

Recommendation 13: Ensure that the admissions policy is always published through all relevant media.

Judgement: *Fully Addressed*

Recommendation 14: Review the admission requirements in relation to the specific technical requirements of the programme and to professional body expectations.

Judgement: *Fully Addressed*

Recommendation 15: Benchmark the Foundation English Language programme entry and exit test against international standards when it is reoffered, to provide confidence that students enrolling on BIT through this entry route meet the required English language standards.

Judgement: *Fully Addressed*

Recommendation 16: Conduct a regular formal review of the admissions policy, considering student performance and stakeholder feedback.

Judgement: *Not Addressed*

The Panel notes that, despite the recommendation to revise the admission policy in light of stakeholder feedback and student performance, neither the support material nor the additional evidence provide any discussion of policy revision. Therefore, the Panel concludes that no appropriate actions have been undertaken to address the recommendation.

Recommendation 17: Review the appraisal processes to ensure that the appraisal cycle is completed and is based on evaluation of previously set objectives.

Judgement: *Partially Addressed*

The Panel observes that the Faculty Performance Appraisal Policy 'Operational Procedures' section, either 'Step 3' is missing from the list of 'Operational Procedures,' or the numbering of steps in the list needs correction. Therefore, to effectively address this recommendation, further revisions to both the policy and appraisal processes are essential.

Recommendation 18: Review staffing levels to ensure an appropriate workload for all staff and processes for regular monitoring and review of staff workload.

Judgement: *Fully Addressed*

Recommendation 19: Review the faculty staffing to ensure that there are enough staff and breadth of experience to deliver the programme.

Judgement: *Partially Addressed*

The Panel acknowledges UCB's ongoing efforts to recruit additional faculty, including senior staff. The Panel also acknowledges UCB's efforts in ensuring sufficiency and breadth of experience among faculty involved in programme delivery. However, based on the reviewed documentation and faculty interviews, the Panel identified a discrepancy between the academic qualifications of certain faculty members and the technical requirements of specific courses.

Recommendation 20: Consistently monitor and evaluate the professional development needs of the staff to ensure that staff requests support the development of staff and meet the requirements of the institution.

Judgement: *Fully Addressed*

Recommendation 21: Review the IT Resource Policy and infrastructure to ensure that the hardware, software, Wi-Fi and Internet are fit for purpose.

Judgement: *Fully Addressed*

Recommendation 22: Implement a formal monitoring mechanism to ensure the maintenance of classroom, IT and library facilities and resources.

Judgement: *Fully Addressed*

Recommendation 23: Review processes for managing health and safety, bring their practice in line with the policy and ensure that evacuation signage around the campus is put in place.

Judgement: *Fully Addressed*

Recommendation 24: Fully embed the MIS reporting within the decision making of the institution and use tracking reporting to monitor laboratory and resource utilisation at UCB.

Judgement: *Fully Addressed*

Recommendation 25: Update the IT Resource Policy and Resource Audit to reflect current practice at UCB.

Judgement: *Fully Addressed*

Recommendation 26: Extend academic advising to include formal regular one-to-one meetings with students to provide an opportunity for the students to discuss and receive guidance on general academic and non-academic issues and review and standardize the advising notes recording system.

Judgement: *Fully Addressed*

Recommendation 27: Formalise processes to ensure that appropriate proactive support for special needs students is provided and monitored for effectiveness.

Judgement: *Fully Addressed*

Recommendation 28: Review the support provided to students who have been notified that they are at academic risk.

Judgement: *Partially Addressed*

The Panel notes that the support provided to at-risk students is described as ‘Mechanisms adopted to enhance their performance.’ While this support is intended to improve student performance, there is no evidence regarding its efficiency. Therefore, UCB should establish a follow-up process to evaluate and ensure the effectiveness of these mechanisms.

Recommendation 29: Review process for monitoring and evaluating student support services to ensure an adequate service is provided.

Judgement: *Fully Addressed*

Standard 3

Academic Standards of Students and Graduates

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

Recommendation 30: Revise all course specifications to ensure that assessment methods are suitable for the subject matter.

Judgement: *Fully Addressed*

Recommendation 31: Revise End-of-Semester Course Review Reports to ensure that they carefully reflect on course assessments and make meaningful recommendations for improvement.

Judgement: *Fully Addressed*

Recommendation 32: Revise the various mappings to ensure that students have an adequate opportunity to improve their communication skills within the programme.

Judgement: *Partially Addressed*

Upon examining the relevant documentation, the Panel observed that some courses, such as CSC451, lack communication-related Course Intended Learning Outcomes (CILOs). Additionally, certain courses, like CIT102, have CILOs that do not address communication competencies. This highlights the need for improved alignment to ensure the adequate incorporation of communication skills across courses.

Recommendation 33: Review mappings in the various course documents to ensure consistency between documents.

Judgement: *Fully Addressed*

Recommendation 34: Carefully measure, analyse and use achievement of ILOs at all levels (Course ILOs, Programme ILOs, University ILOs) for programme improvement.

Judgement: *Fully Addressed*

Recommendation 35: Review the effectiveness of the assessment process and adjust the annual programme review to include the reporting of ILO achievements.

Judgement: *Fully Addressed*

Recommendation 36: Revise plagiarism policies to ensure that 20% is used as a starting point for investigating plagiarism.

Judgement: *Fully Addressed*

Recommendation 37: Consistently apply the Policy on Academic Honesty and Integrity.

Judgement: *Fully Addressed*

Recommendation 38: Maintain an ongoing register of cases of academic misconduct and plagiarism.

Judgement: *Fully Addressed*

Recommendation 39: Review the implementation of the internal moderation process to ensure that it contributes to the improvement of courses and the programme.

Judgement: *Fully Addressed*

Recommendation 40: Establish formal and appropriate evaluation mechanisms to ensure effective implementation of the internal moderation process.

Judgement: *Fully Addressed*

Recommendation 41: Review the external moderation process and the related policy to ensure that they are consistent.

Judgement: *Fully Addressed*

Recommendation 42: Review the external moderation process and how it is implemented, including the inadequacy of the number of external moderators, to ensure that it contributes to the improvement of courses and the programme.

Judgement: *Partially Addressed*

From its review of the relevant documentation, the Panel observes that UCB's approach to reviewing the external moderation process remains insufficient. This process should comprehensively address aspects such as the selection of external moderators, the criteria for selecting courses, the implementation of external moderators' recommendations, and the timeline for updating the list of moderators. The evidence presented demonstrates the implementation of the external moderation process for courses, highlighting an increase in the number of moderators involved in the process. Nevertheless, further enhancements are necessary to ensure a systematic and effective approach to external moderation that effectively contributes to the improvement of courses and the programme.

Recommendation 43: Establish formal and appropriate evaluation mechanisms to ensure the effectiveness of the external moderation process.

Judgement: *Not Addressed*

As outlined earlier in this report, it is essential for UCB to regularly evaluate the effectiveness of the processes employed to ensure the proper implementation of teaching, learning, and assessments. Among these processes, external moderation requires clear mechanisms to evaluate each step, such as the selection, appointment, and performance of external moderators, focusing on their contributions to enhancing course assessments.

Recommendation 44: Conduct a formal evaluation to measure the effectiveness of the internship.

Judgement: *Fully Addressed*

Recommendation 45: Ensure that the supervisors conduct a more thorough review of the graduation projects to ensure technical correctness.

Judgement: *Partially Addressed*

From the review of the relevant documentation, the Panel recognizes the thoroughness of the process used for evaluating students' graduation projects. However, the Panel found limited evidence regarding the actual implementation of this process by the project supervisors. Furthermore, the additional documentation suggests that no rubrics were utilized, with only a summary assessment sheet being provided. Therefore, additional improvements are required to effectively address this recommendation.

Recommendation 46: Ensure that the students are given more challenging graduation projects to ensure that the projects are appropriate for the Bachelor level.

Judgement: *Fully Addressed*

Recommendation 47: Raise the level of difficulty in courses to be appropriate for a Bachelor programme.

Judgement: *Fully Addressed*

Recommendation 48: Use student progression and graduate destination data for programme analysis and improvement.

Judgement: *Fully Addressed*

Recommendation 49: Review the curriculum taking into consideration the detailed feedback of graduates and employers.

Judgement: *Fully Addressed*

Standard 4

Effectiveness of Quality Management and Assurance

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

Recommendation 50: Clarify the quality assurance management system.

Judgement: *Fully Addressed*

Recommendation 51: Ensure the continuous reporting of the meetings that the Quality Assurance and Accreditation Committee holds.

Judgement: *Fully Addressed*

Recommendation 52: Review the effectiveness of the annual review process.

Judgement: *Fully Addressed*

Recommendation 53: Develop formal mechanisms for the evaluation of the effectiveness of actions included in the improvement plans of the annual programme reviews.

Judgement: *Fully Addressed*

Recommendation 54: Track the measures that the DIT implements in compliance with quality assurance best practices and assess their effectiveness.

Judgement: *Fully Addressed*

Recommendation 55: Review criteria for selecting institutions and programmes for benchmarking taking into consideration similarity in profile such as type and size of the institution/ programme.

Judgement: *Not Addressed*

From review of the relevant documentation, the Panel notes first, the irrelevance of the evidence provided and the random selection of institutions for benchmarking needs. These institutions vary from one initiative to another and even include institutions that are not of the size of UCB. Thus, the recommendation remains unaddressed.

Recommendation 56: Capitalize on the benchmarking outcomes to ensure the quality of academic programme and implement any changes in this programme in compliance with quality-assurance practices.

Judgement: *Not Addressed*

From the review of the documentation, the Panel notes that having UCB as a member of a consortium of universities that define benchmarking criteria does not handle this recommendation. The institution should focus on the outcomes of benchmarking. Thus, the recommendation remains unaddressed.

Recommendation 57: Redesign surveys used for collecting comments in a way that would allow better analysis of the collected comments to be carried out.

Judgement: *Fully Addressed*

Recommendation 58: Communicate any implemented improvements to all stakeholders and assess the effectiveness of these improvements.

Judgement: *Fully Addressed*

Recommendation 59: Review the programme to ensure that it fully addresses the needs of the labour market.

Judgement: *Partially Addressed*

From review of the relevant documentation, the Panel notes the limited representativeness of industry partners on an Industry Advisory Borad (IAB) meeting (2 attendees) along with the high number of absentees (9). However, the additional documentation shared with the Panel refers to a market analysis conducted by UCB that should be useful for capturing the latest trends and needs in the market. In addition, from interview with the senior management of the programme, the Panel learned that the IAB members have been updated resulting in a better attendance.

Recommendation 60: Track clearly the recommendations of the IAB that the IT Department implements as well as follow-up on the implementations of the IAB recommendations.

Judgement: *Fully Addressed*

III. Conclusion

The follow-up process was conducted based on the programme's progress report and supporting materials submitted to the BQA, which detailed the progress achieved in addressing the recommendations from the review. Furthermore, the process incorporated documents provided during the virtual follow-up visit, as well as evidence collected through interviews with relevant stakeholders.

The follow-up Panel concluded that 43 recommendations were fully addressed, 10 were partially addressed, and 7 remain not addressed.

Overall, the evidence showcased the institution's ability and commitment to sustaining the improvements necessary to uphold the programme's quality. As a result, the Bachelor of Science in Information Technology programme offered by the University College of Bahrain received a general judgment of "Adequate Progress."

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IV. Appendices

Appendix A: Judgement per Recommendation

Judgement	Criteria
Fully Addressed	The institution has demonstrated marked progress in addressing the recommendation. The actions taken have led to significant improvements in the identified aspect(s) and, as a consequence, in meeting the indicator's requirements.
Partially Addressed	The institution has taken positive action 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 institution 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 review standards. Weaknesses persist in relation to this recommendation.

Appendix B: Overall Judgement

Overall Judgement	Criteria
Good Progress	The institution has fully addressed the majority of the recommendations contained in the review report, these include recommendations that have most impact on the quality of its delivery and academic standards. The remaining recommendations are partially addressed.
Adequate Progress	The institution has at least partially addressed most of the recommendations contained in the review report, including those that have major impact on the quality of 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.
Inadequate Progress	The institution has made little or no progress in addressing a significant number of the recommendations contained in the review report, especially those that have main impact on the quality of its delivery and academic standards.