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للمؤهلات وضمان جودة التعليم والتدريب
National Authority for Qualifications &
Quality Assurance of Education & Training



Directorate of Higher Education Reviews

Programme Follow-Up Visit Report

**Bachelor of Science in Computer Science
College of Computer Studies
AMA International University Bahrain
Kingdom of Bahrain**

First Follow-up Visit Date: 2-3 June 2015

Review Date: 28-30 January 2013

HC058-C2-F002

Table of Contents

1. The Programme Follow- up Visit Overview.....	2
2. Indicator 1: The Learning Programme.....	3
3. Indicator 2: Efficiency of the Programme.....	7
4. Indicator 3: Academic standards of the graduates.....	10
5. Indicator 4: Effectiveness of quality management and assurance.....	15
6. Conclusion	18
Appendix 1: Judgement per recommendation.....	19
Appendix 2: Overall Judgement.....	20

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 Computer Science (BSCS), at AMA International University Bahrain (AMA) in the Kingdom of Bahrain was revisited on 2-3 June 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 AMA's BSCS since the programme was reviewed on 28-30 January 2013.
- (ii) Provide further information and support for the continuous improvement of academic standards and quality enhancement of higher education provision, specifically within the BSCS programme at AMA, and for higher education provision within the Kingdom of Bahrain, as a whole.

1.2. Background

The programme review of the BSCS programme, at AMA in the Kingdom of Bahrain was conducted by the DHR of the QQA on 28-30 January 2013.

The overall judgement of the review panel for the BSCS programme, of AMA was that of '**no confidence**'. Consequently, the follow-up process incorporated the review of the evidence presented by AMA 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 AMA's BSCS programme for each Indicator was as follows:

Indicator 1: The learning programme; '**satisfied**'

Indicator 2: Efficiency of the programme; '**not 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 28-30 January 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 Computer Science

The Bachelor of Computer Science programme is the only programme that was offered by the College of Computer Science at the time of this follow-up visit. The programme is managed by the Department of Computer Science and 11 faculty members, including the Dean, Assistant Dean and Head of Department, contribute to the delivery of the programme. The Programme consists of a total of 198 credit units distributed over 11 trimesters. The 198 credit units are grouped into general education courses, mathematics and science courses and computing courses, including ethics in computing, research project A & B, practicum and three elective courses. At the time of the follow-up visit there were 240 students enrolled in the programme, 60% of which were students holding full-time jobs.

2. Indicator 1: The Learning Programme

This section evaluates the extent to which the BSCS programme of AMA, has addressed the recommendations outlined in the programme review report of January 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: Maintain a period of stability in the curriculum so that the changes introduced recently can be evaluated against full cohorts of students

Judgement: Fully Addressed

The College of Computer Studies (CCS) has a Programme Development, Review and Enhancement policy that is revised and made effective since November 2014. The policy governs the process for revising or enhancing current programmes offered by the University and identifies the responsibility of different units and committees. The Panel studied the policy and found that the University reviews the programme on 3 – 5 year cycle whereby major changes to the curriculum, revision and changes to the ILOs, significant changes on teaching, learning, and assessments are considered. The policy requires the College Curriculum Review Committee (CRC) to conduct formal benchmarking, collect internal and external stakeholders' feedback, and incorporate the results from market analysis. During the follow-up visit, the Panel learned that there is a defined approval process for the revised programme where the CRC proposes the revised programme to the Academic Council (AC). The AC forms a Curriculum Oversight Committee (COC) to review the proposed revision, and send it back to the AC for final approval. During the interviews, the Panel confirmed that the last review of the programme was conducted in the academic year 2012–2013 and there has been no major changes to the programme since that review, except for adding the human right course as per HEC regulation. In addition, CSCI533 and CSCI613 have been revised as per QQA review report's recommendations of 2013. In meetings with students, they confirmed that there are no major changes encountered in the programme since 2012–2013. During interviews with the faculty, the Panel was informed that major changes are only addressed during the next periodic review, which is scheduled for the end of the academic year 2015-2016. In contrast, minor changes such as changes on textbook or contents are performed at the end of each academic year. Changes less than 15% of the programme specification, the Panel was informed, are performed within the College without the need to go through the AC. However, changes that exceed 15% are forward to the AC for approval.

Recommendation 1.2: *Revise the Networking courses so that they are not heavily oriented to CISCO*

Judgement: *Fully Addressed*

CCS revised the course specifications of the networking courses CSCI533 and CSCI613. Data Communications and Networking 1 (CSCI533) is a fundamental network course that describes the concepts of the layered networks model. Data Communication and Networking 2 (CSCI613) is an advanced network course with more in-depth knowledge about routing and protocols. The Panel noted from the course files that the College added new topics to these courses to balance the theoretical and practical contents. The added theoretical parts changed the courses' orientation to become more academic rather than being vocational training courses. The College also replaced the textbook for both courses with more academic oriented books, and introduced another simulator (GNS3), for network simulation in addition to the CISCO simulator. There is evidence from the course files of changes to the assessments of these courses to balance the theoretical and practical knowledge. There is also evidence that instructional materials have been changed to deliver theoretical knowledge such as presentation slides and research articles used during lectures. In meetings with students, the Panel learned that because of these changes students are now acquiring theoretical knowledge and then practicing it in the laboratory. During interviews with the course coordinators, the Panel learned that the Department revised the course ILOs' contextual part to reflect the addition of new topics as needed.

Recommendation 1.3: *Revise the mapping of science courses' ILOs with the programme ILOs*

Judgement: *Partially Addressed*

The Course Intended Learning Outcomes (CILOs) of the science courses are mapped to the programme ILOs. The exercise has mainly resulted in mapping all the science and mathematics courses to three general programme ILOs: knowledge and understanding (A2: An ability to apply knowledge of computing, mathematics and science appropriate to the discipline), and general skills (D1: An ability to function effectively in teams to accomplish a common goal; and D2: An ability to communicate effectively within a range of audiences). During the follow-up visit, the Panel examined the course files for the science courses and found that the contents and assessments of these courses are enabling students to develop basic knowledge and understanding in the different science areas. There is also evidence of teamwork as illustrated in group projects, laboratory experiments and group assignments. Moreover, there is evidence of developing communication skills, as students are required to deliver presentations and prepare scientific reports during laboratory

sessions. Most interviewed students found these courses valuable in developing their general knowledge, and sometimes to their specialization discipline in case of mathematics courses. They also indicated that these courses have improved their written and oral communication skills and supported them in building effective functioning team. However, some students were concerned with the large number of credits allocated to the science courses. During interviews with faculty members, the Panel was informed that these courses are part of the accreditation requirements of Accreditation Board for Engineering and Technology (ABET). In meetings with the BSCS faculty members, the Panel learned that these courses are developed and mapped to the programme ILOs by the College of General Studies and that there is a limited role for the programme team in deciding the required science courses, setting their CILOs and mapping them to the programme ILOs. The Panel recommends that the Department take more effective role in identifying the required courses and their content so that these courses contain topics that are relevant to the computer science discipline and further contribute to the achievement of the overall programme learning outcomes.

3. Indicator 2: Efficiency of the Programme

This section evaluates the extent to which the BSCS programme of AMA, has addressed the recommendations outlined in the programme review report of January 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: *Ensure that its admission examinations are valid and designed based on international norms and practice*

Judgement: *Partially Addressed*

AMA has a revised admission policy which stipulates that applicants must have a recognised high school certificate. However, no cut off score is set. Applicants' score is calculated based on their performance in the AMA admission tests (70%) and the Dean's interview score (30%) only. The Panel studied the profile of the admitted students and noted that not all applicant were required to set the admission examination tests and the Dean's interview. During the site visit interviews, it was indicated that graduates of AMA International School are exempted from these tests and have direct access to university programmes. Nonetheless, this is not clearly stated in the admission policy. Moreover, interviewed staff could not clearly explain on what basis these exemptions are granted. The admission tests comprise mathematics, English language, science and logical reasoning where applicants are expected to maintain a cut-off score of 60%, 60%, 50% and 50% respectively. Applicants scoring below cut-off score in mathematics and English language need to complete successfully remedial courses, namely MATH300, PREN300, PREN301 and PREN302. However, it is not clear what are the consequences for not meeting the minimum required score in science and logical reasoning and hence the reason for the minimum score. AMA has benchmarked its admission tests to those of international formal tests such as the Scholastic Aptitude Test (SAT), Trends in International Mathematics and Science Study (TIMSS), and the QQA National Examinations. However, all these benchmarking activities are conducted at a superficial level, as these are informal benchmarking activities conducted based on limited information available on websites, some of which are not considered reliable. Once applicants set these tests, reliability, validity and item analysis is conducted by AMA. Admission tests are also subject to external reviews. However, the Panel is concerned that the external examiners are not experts in setting such type of examinations. Moreover, it is not clear what criteria are used to evaluate the examination against. As stated earlier, the admission interview conducted by the Dean mounts to 30% of the total score. It is stated in the admission policy that the Dean assesses applicants in the following categories: communication skills,

personality and motivation, and general knowledge in the programme's related field. The Panel studied the samples of admission interviews assessment sheets provided and noted that these are very basic sheets consisting of four general questions that the interviewee is asked with no clear rubric on how the grades are allocated. This needs to be addressed.

Recommendation 2.2: Review the length of study needed for completion of the BSCS for full-time working students

Judgement: Not Addressed

The BSCS programme comprises 198 credit units, and students are allowed to register a maximum of 18 and a minimum of 12 credit units per trimester. This applies for both working and nonworking students, where working students represent 60% of the total students' population. AMA conducted a study on its students to evaluate the appropriateness of the length of study for its working students. The study was administrated to all students (240 students), and 91 of these students replied. The outcomes indicate that 64% of the students who replied to the survey are satisfied with the current study duration. This, in the Panel's opinion indicate that 36% of the working students who filled the survey might need longer study duration. However, the College did not investigate further the reasons of these replies. The study conducted also states that 71% of the students enrolled in the programme 'are able to manage their study and working duties without any problem'. Nonetheless, the study does not explain what the condition of the other 29% is. The Panel recommends that the College further consider the length of study allowed to working students.

Recommendation 2.3: Recruit experienced Computer Science PhD holders with appropriate specializations taking diversity into account

Judgement: Not Addressed

The submitted progress report states that the College has 'developed and implemented a hiring plan to ensure that the programme has adequate and qualified faculty members'. However, the provided evidence comprises a table indicating the number and date of faculty members already being hired in the period from May 2014 to April 2015. During the site visit, there were three faculty members, out of the five PhD holders, whom have been hired within a month from the date of the follow-up visit, two of whom joined the University a week before this site visit. However, the need for these faculty members was not identified in the hiring plan. During interview sessions, the Panel was informed that AMA has a pool of teaching staff that it recruits from, based on each trimester's teaching needs. Two months before the start of each trimester, the Head of Department (HoD) is expected to fill a

Manpower Request Form (MRF) to indicate the teaching staff needed for the upcoming trimester. This has resulted in a number of occasions where staff members have joined the College after the start of the trimester as was reported by students and staff interviewed during the follow-up visit. The Panel studied the data provided on teaching staff members and noted that the list of staff recruited to teach on the programme keeps changing on a trimester basis. This, in the Panel's view, leads to instability in the College and might hinder the learning experience provided to the students. The Panel recommends that the College develop and implement a long-term recruitment plan that ensures a stability in the recruitment of its faculty members especially those with PhD degrees.

Recommendation 2.4: *Implement suitable plans to improve the quality of research output of its faculty members*

Judgement: *Not Addressed*

The College has developed a 2014-2015 research strategic plan that is aligned to the University Strategic Plan. The College Research Plan calls for faculty members to actively get involved in research and indicates the type of research faculty members are expected to conduct. It also indicates the support given to faculty members once the research is accomplished. During interview sessions, faculty members reported that they are expected to complete at least one research paper per year and that there are deadlines for submitting reports on the different stages of their work. However, the Panel was not provided with clear plan on how the College intends to build the research capacity of its faculty members and support them in accomplishing these activities. Moreover, in a number of interview sessions, it was reported that faculty members were exempted from research activities because they were overloaded with teaching and administration duties. The Panel recommends that the College develop and implement a detailed plan that would develop faculty's abilities and improve the quality of their research output.

4. Indicator 3: Academic standards of the graduates

This section evaluates the extent to which the BSCS programme of AMA, has addressed the recommendations outlined in the programme review report of January 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 3.1: *Ensure that assessments meet the set course ILOs*

Judgement: *Partially Addressed*

The Teaching, Learning and Assessment policy was revised and subsequently the College introduced a mechanism to align assessments with CILOs through the involvement of 'specialization coordinators' and three approval levels. There are three specialization coordinators in the Department each of them is responsible for ensuring that assessment tools are appropriate to assess the achievement of the course ILOs. The course coordinator prepares the assessment plan for the course where each CILO is mapped to an assessment instrument, and performance criteria are defined along with the weight for each CILO. The assessment plan is then revised and endorsed by the HoD and the Dean. Moreover, the course coordinator prepares the Table of Specification (TOS) for each assessment method where questions are mapped to ILOs, topics covered and the type of measured knowledge or skills. The TOS identifies the points allocated for each ILO to determine the weight of measuring a particular ILO within an assessment instrument. The TOS is revised by the specialization coordinator and endorsed by the HoD, the Associate Dean and the Dean. The Panel noted that all faculty members, including newcomers and part-timers, are aware of this mechanism as reported during the interview sessions and the course files show a consistent implementation of this mechanism. However, the Panel noted that the courses are divided into two general specializations; computer sciences and management information systems, which do not further categorise the sub-speciality of the courses within the programme. Moreover, the Panel is concerned with the fact that the Dean and the HoD are both a specialization coordinator, thus, they perform self-review for their courses.

Recommendation 3.2: *Ensure that the programme when revised next it is benchmarked at all levels and brought in line to similar programmes offered locally, regionally and internationally*

Judgement: *Fully Addressed*

There is a developed benchmarking policy that defines the purpose and procedures for both informal and formal benchmarking. The College has conducted an informal benchmarking exercise with three universities, locally, regionally and internationally. The purpose of this informal benchmarking was to compare the BSCS programme with other similar programmes, and identify areas of improvements. The scope of the informal benchmarking exercise covers a comparison of computer science core courses, and focuses mainly on areas related to credit hours, teaching and learning methods, course objectives, ILOs and assessment methods. During meeting with senior management, the Panel learned that some of the recommendations from the informal benchmark were implemented such as increasing activities in the laboratory for CSCI422, which was implemented starting the first trimester of the academic year 2014-2015. However, other recommendations such as the increase of elective courses will be incorporated during the periodic review for the programme scheduled for the end of the academic year 2015-2016. Moreover, the College submitted a letter of intent for a formal benchmark with regional universities that it aims to benchmark with before the next periodic review of the programme, as reported by the faculty and senior management.

Recommendation 3.3: *Review its assessment policies to ensure that all assessments are checked internally for correctness and conformance to the ILOs before being used*

Judgement: *Partially Addressed*

During the follow-up visit, the faculty of the BSCS programme explained the process of the pre-moderation mechanism that was put in place since the first trimester of the 2012-2013 academic year which was applied for sample of courses, and revised in the second trimester of the academic year 2014-2015 to cover all courses. The specialization coordinator moderates all examinations (i.e. prelim, midterm, and final) to validate the appropriateness and accuracy of the assessment and ensure it is aligned to course ILOs. After validation by the specialization coordinator, the assessment is approved by the HoD, the Associate Dean and endorsed by the Dean before running the examination. During the follow-up visit, the Panel scrutinised the course files, and found that the pre-moderation mechanism is implemented consistently across all courses since the second trimester of the academic year 2014-2015. The Panel, however, is concerned about the effectiveness of this process as it depends on three specialization coordinators to moderate all assessments. This could produce a massive load on the coordinators and consequently impact the quality of

the moderation outcomes. Moreover, two of the specialization coordinators have administrative roles in the examination approval process which might lead to duplication of reviews. The Panel recommends that the College revise the pre-moderation process to improve its effectiveness. There is also evidence of post-moderation process in the course files. Interviewed faculty members explained that the post-moderation process was implemented first in the second trimester of the academic year 2014-2015 to ensure that the first marker has made correct and accurate decision when grading the student's examination paper and that it is graded according to the assessment criteria. The HoD appoints a faculty member from the Department to perform the post-moderation process and ensures total mark is accurate and correct. The University has also revised its Teaching, Learning and Assessment policy, and reduced the number of summative assessments from nine to four. Interviewed faculty members indicated their appreciation of this improvement because it helps in developing more rigors, succinct and focused assessment instruments, as was reported. There is also evidence of professional training sessions conducted for faculty members in order to develop and improve skills relevant to assessment, improving students' outcomes, moderations, and ILOs.

Recommendation 3.4: *Review the examination moderation policy so that samples of all courses are moderated*

Judgement: *Fully Addressed*

The University revised a set of assessment policies to ensure validity of assessments instruments and that all assessments are aligned to the course ILOs. The moderation policy revised in November 2014 defines the roles and responsibilities of all involved individuals, the scope and purpose of internal and external moderation, and the procedures for pre-moderation, post-moderation, external moderation, and double marking. The policy ensures that all assessment instruments are moderated according to criteria defined in the policy for selecting the sample of students assessed work. The Panel acknowledges the role of the college's Committee for Quality Improvements (CQI) in validating the implementation of the moderation processes conducted by the moderators. The CQI's reports submitted to the College where reviewed and action plans were developed to address the recommendations of these reports. During the follow-up visit, the Panel studied the moderation process in place and found that moderation is implemented for prelim, midterm and final examinations. Moreover, external examiners also comment on course files that comprise samples of students assessed work including assignments. However, the Panel noted that some of the assessed projects were not externally moderated. This needs to be addressed.

Recommendation 3.5: *Review its policy so that the external examiner takes a more active role in the moderation of assessment instruments and assessment results*

Judgement: *Partially Addressed*

The revised moderation policy defines the purpose of the external examiner during the moderation for all assessment instruments. The policy identifies the roles of both the programme examiner and the course examiner. There are also defined guidelines that describe the procedures and the objectives of external examination. The programme examiner has more role on revising the programme aims, ILOs, assessment processes, students' evaluation and survey, and subsequently provides recommendations to enhance the programme. On the other hand, the course examiner revises the course ILOs, contents, teaching and learning methods and moderates summative assessments. The Panel studied the submitted report by the programme external examiner. The report evaluates the college's progress in addressing QQA's review report recommendations. Moreover, the Panel scrutinised the course external examiners reports and noted that these reports address different course aspects including revising course ILOs, and the appropriateness of the final examinations. The Panel found these reports are useful to improve the course specifications and the assessment methods used. However, the external moderation - except for the final examination - is a post-assessment process, thus the Panel recommends the College to extend the pre-assessment external moderation to include all assessment instruments. Moreover, the Panel noted that the College assigns one external moderator for all programme courses, despite the different sub-specializations of the courses. The Panel recommends that the College expand the list of external moderators to cover the different specializations needed by the programme. Nonetheless, the Panel noted with appreciation the improvement plans developed by the College to address the external examiner's recommendations for the courses and the programme. There is also evidence of improved processes as a result of implementing the external examiner's recommendations. For example, the inclusions of a plagiarism report as a requirement for senior projects.

Recommendation 3.6: *Undertake a detailed study and analysis of the retention rate on the programme*

Judgement: *Partially Addressed*

The College conducted a cohort analysis for the BSCS programme for the academic years 2008–2015. The cohort analysis shows that the progression rate starts as low as 50% in the first year of study and reaches more than 82% in the last year of the programme. The programme team justified the low rate of progression to the fact that the number of inactive students is often high in the first two years. The university regulations allow students to discontinue their studies according to some

circumstances. Furthermore, the retention rate is increasing gradually as evidenced from the cohort analysis; 45.7% for 2008-2009 cohort, 59.2% for 2009-2010 cohort, 64.1% for 2010-2011 cohort, and 62.5% for 2012-2013 cohort. However, the retention rate is still low; therefore, the College has conducted a survey for the BSCS students to improve the retention rate based on students' feedback. The analysis of this survey suggested some actions to be undertaken by the College. The first suggestion is improving the advising process to help working students' balance their work duties with studying requirements. During meeting with faculty, the Panel learned that the faculty of BSCS programme is treating working students carefully to ensure that they do not overload their schedule and affect their duties at work. Working students have also reported that advisors are assisting them during enrolment to ensure a balance between work and study. Secondly, the students have also appreciated that there are faculty members who provide them with tutorial sessions and consultation hours to address their weakness. These support actions are documented in the revised Students' Academic Support Services policy. However, course offerings and course schedule still constitute the main obstacle for improving students' retention. Students reported this during interview sessions in the follow-up visit. Some interviewed students had concerns that not all courses are available during enrolment, which often affect their progression negatively. The Panel recommends the College analyse the causes of this problem and provide immediate actions to resolve it.

Recommendation 3.7: *Maximize fully the functions of PIAP*

Judgement: *Fully Addressed*

The University developed a policy and procedure for the Programme Industry Advisory Panel (PIAP). The PIAP members are experts in IT from various fields including the Public Sector, NGOs, Financial & Banking sectors and alumni. The Panel noted that the PIAP members have an active role in supporting the BSCS programme as reported in many minutes of meetings. All meetings minutes are documented and were made available to the Panel during the follow-up visit. The provided meeting minutes contained a number of actions and recommendations made by the PIAP to improve the BSCS programme that were carried out by the programme team. The PIAP members have a clear remit and objectives of their committee, and are passionate to support and enhance the BSCS programme. During meetings with the PIAP members, the Panel noted that they are very enthusiastic, and eager to contribute more than just advising. The Panel appreciates that a functioning advisory committee is in place with enthusiastic members and suggest that their recommendations are systematically used to inform programme improvements in the upcoming programme reviews.

5. Indicator 4: Effectiveness of quality management and assurance

This section evaluates the extent to which the BSCS programme of UCB, has addressed the recommendations outlined in the programme review report of January 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 and implement a mechanism to monitor the effectiveness of its policies and procedures*

Judgement: *Fully Addressed*

As stated in the submitted progress report, the Quality Assurance and Accreditation Office (QAAO) oversees the implementation of all university policies and procedures and coordinates with the college's Committee for Quality Improvement (CQI) to ensure that quality improvement initiatives are implemented at a college-level. During interview sessions, the Panel confirmed that faculty and staff members are well informed about the policies and procedures pertaining to their work. The QAAO has developed an audit calendar based on which the Office conducts a number of audits to assess the effectiveness of the implantations of the university's policies and procedures. The Panel was also provided with a number of evidence of these audits and their outcomes, which were utilised to develop an improvement plan. The Panel encourages the College to continue with this process.

Recommendation 4.2: *Develop and implement an inclusive decision-making process*

Judgement: *Partially Addressed*

During interview sessions, it was evident to the Panel that faculty members are well informed about the policies and procedures pertaining to their work and decisions taken by top management. This was confirmed further through the evidence provided, especially through the college and department minutes of meetings. The Panel is concerned, however, that faculty members are still on the receiving end of the decision-making and are not part of decision-making as most decisions are developed in a top-down manner as was clear from the interview sessions.

Recommendation 4.3: *Ensure that it adheres to its own policy and timescales for program development, review and enhancement*

Judgement: *Fully Addressed*

Except for changes due to the Higher Education Council (HEC) instructions, AMA has stabilised the BSCS programme and has maintained the curriculum to ensure stability. During interview sessions the Panel was informed that all feedback received from different stakeholders are logged and discussed. Those that can be addressed by fine tuning the course syllabus and the programme delivery are incorporated in the annual review of the programme. However, those that would lead to major curriculum changes are kept to be discussed further during the next periodic review of the programme which is scheduled at the end of the 2015-2016 academic year as per AMA's Program Development, Review and Enhancement Policy. This is addressed further under Indicator 1

Recommendation 4.4: *Develop and implement a policy and procedures to communicate findings and improvements to the different stakeholders*

Judgement: *Partially Addressed*

AMA has a policy, that has been developed in October 2011, on the dissemination of public information. The policy stipulates procedures used and line of responsibilities for publishing newsletters, press releases and the content of the university's website. The document, however, does not clearly state the university's policy with regard to communicating findings of surveys to different stakeholders. Notwithstanding the above, the Panel was provided with evidence of number of occasions when stakeholders were provided with the outcomes of their feedback and the actions taken as a result. Interviewed students and members of the Programme Industry Advisory Panel confirmed this. The Panel recommends that the University revise its Public Information Dissemination policy to state clearly the mechanism through which findings is disseminated to different stakeholders.

Recommendation 4.5: *Increase professional development activities for faculty members in areas of real academic value*

Judgement: *Partially Addressed*

The College of Computer Studies has developed a Faculty Development Plan with primary objective, as stated, of ensuring 'that appropriately qualified faculty requirements of the different programmes offered under the College of Computer Studies are met'. The document however, lists a number of operational objectives, strategies, performance measures and activities that are stated under four main key areas namely: instruction, research, community engagement and quality assurance and accreditation. It is not clear how these are linked to faculty's individual needs or how does the College identify these needs. Moreover, a large number of these activities are yet to be implemented or are implemented for a limited number of faculty members making it premature to assess its effectiveness.

Recommendation 4.6: *Widen the area of labour market scoping including private and public sectors to diversify its sources of data*

Judgement: *Not Addressed*

On 24 February 2015, AMA signed a memorandum of service agreement with a consulting firm to conduct a market scoping study for all AMA programmes, with a general proposal submitted by the consulting firm on 24 March 2015 that states the overall scope of the study without providing clear time line or specific methods for scoping the market. Until the time of the follow-up visit, no evidence was provided on a final agreement between the University and the consulting firm on the proposal.

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 Computer Science programme offered by AMA International University Bahrain has made 'inadequate progress' and as a result, the programme will be subjected to a second follow-up visit.

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,