



هيئة ضمان جودة التعليم و التدريب
Quality Assurance Authority for Education & Training

Higher Education Review Unit Programme Re-review Report

**Bachelor of Science in Business Informatics
AMA International University- Bahrain
Kingdom of Bahrain**

Date Reviewed: 20 – 21 November 2011

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1. The Programme Review Process

1.1 The Programme Review Framework

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

Indicator 1: Curriculum

Indicator 2: Efficiency of the programme

Indicator 3: Academic standards of the graduates

Indicator 4: Effectiveness of quality management and assurance

Conclusions reached are in terms of minimum standards, and the summative judgment falls into one of three categories:

- (i) *The programme satisfies all four indicators and gives confidence, or*
- (ii) *There is limited confidence because up to two indicators are not satisfied, or*
- (iii) *There is no confidence in the programme because more than two indicators are not satisfied.*

1.2 The programme review process at the AMA International University - Bahrain

The programme re-review of the Bachelor of Science in Business Informatics of the AMA International University – Bahrain (AMAIUB) was conducted by the Higher Education Review Unit (HERU) of the Quality Assurance Authority for Education & Training (QAAET) in terms of its mandate to review the quality of higher education in Bahrain. This Report provides an account of the HERU programme review process and the findings of the Review Panel based on the Self-Evaluation Report (SER) and appendices submitted by AMAIUB, the supplementary documentation made available during the site visit, as well as interviews and observations made during the review site visit, which was conducted on 20-21 November 2011.

AMAIUB was notified by the HERU/QAAET in August 2011 that it would be subject to a programme quality re-review of its Bachelor of Science in Business Informatics with the site visit taking place in November 2011. In preparation for the programme review, AMAIUB conducted its programme self-evaluation and submitted a Self-Evaluation Report (SER) with appendices in June 2011. It is expected that the AMAIUB will use the findings presented in this Report to strengthen its Bachelor of Science in Business Informatics.

AMAIUB began offering the Bachelor of Science in Business Informatics in 2002. Located within the AMAIUB's College of Administrative and Financial Sciences (CAFS), the Bachelor of Science degree in Business Informatics is one of three degree programmes currently offered by CAFS. The two other programmes include the undergraduate Bachelor of Science in International Studies (BSIS) (formerly the Bachelor of Arts in International Studies) and the postgraduate Master of Business Administration (MBA).

2. Indicator 1: Curriculum

The programme complies with existing regulations in terms of the curriculum, the teaching and the assessment of students' achievements; the curriculum demonstrates fitness for purpose.

- 2.1 The vision and mission of the University is clearly articulated and communicated to both staff and students. In support of the vision and mission, the College of Administrative and Financial Services provides a set of goals which indicate its ambition to produce qualified professionals who have the theoretical, analytical, entrepreneurial and practical skills to become future leaders and experts in their chosen business career. These goals are further contextualised and articulated in the programme aims and programme ILOs for the Bachelor of Science in Business Informatics (BSBI).
- 2.2 The Review Panel has concerns in relation to duration of study which was required to achieve the award of Bachelor of Science in Business Informatics. For both the revised programme which is being proposed and the existing programme, the award can be achieved within 10 trimesters (3.33 years). The Review Panel further noted from the SER that the average length of study of graduating students was 3.53 years with 251 (54% of the students) graduating within three years. The Review Panel notes that this placed a very heavy workload on students, many of whom are working full time. The Panel suggests that the institution review the impact of this practice on the overall performance of the students and implement findings.
- 2.3 The programme ILOs are appropriate and are matched to the programme goals and demonstrate the balance of theoretical, practical and generic skills which the programme seeks to develop.
- 2.4 The course specifications clearly state the course learning outcomes and there has been an attempt to map these against the programme intended learning outcomes. However, it is evident from an examination of the course specifications that both the rationale and the mechanism for doing this have not been clearly understood. Furthermore, there is clear evidence of inconsistencies in the course specifications

and in the mapping of course learning outcomes to programme learning outcomes. Such inconsistencies hinder the understanding of how individual courses contribute to the overall programme learning outcomes.

- 2.5 There is also evidence of inconsistency in some Course Specifications in describing how the course objectives are met by the course specific outcomes which students are expected to achieve. In some Course Specifications, the course objectives are not aligned with the course outcomes which are to be achieved.
- 2.6 Changes which have been implemented in the existing programme content and, more notably, the changes which have been made when proposing the revised programme content demonstrate that careful consideration has been given to the syllabus. This has been informed by a consideration of existing standards for curriculum content in the discipline - in particular the IS210 Curriculum Guidelines for Undergraduate Degree Programs in Information Systems. These changes have also been considered in terms of EQANIE criteria and procedures (European Quality Assurance Network for Informatics Education).
- 2.7 Examples of good practice, which support students to achieve and demonstrate the programme goals (particularly with respect to employability), are the Practicum (which in the new programme has been extended and enhanced as the Business Informatics Internship) and the BSBI Capstone Project which has also been developed as part of the new curriculum.
- 2.8 The Review Panel learned that the College obtained accreditation of the programme by the European Council for Business Education. The Review Panel would encourage the College to extend its efforts in seeking accreditation by external bodies and notes its ambitions articulated in the SER to seek AACSB/EQUIS recognition.
- 2.9 The course syllabi are well documented in the course specifications which also provide an indication of the teaching, learning and assessment approaches which are adopted. However, the Review Panel noted some confusion arising out of the fact that different parts of the College use different terminology to describe the same courses and would recommend that this is clarified through adoption of unique names and course codes for courses irrespective to which Department they are affiliated.
- 2.10 The syllabus also incorporates remedial courses in Mathematics and English language. Whilst the Review Panel is supportive of the use of remedial courses to provide an underpinning and reinforcement of basic knowledge and skills which students require to participate fully and be successful in their studies, it would question the rationale for delivering these courses to students who are simultaneously undertaking other courses for which these are not listed as pre-

requisites. The courses are focussed on addressing problems which students encounter because they do not have the relevant pre-requisite skills to gain admittance to the programme. Ideally these courses should be offered prior to formal enrolment of applicants on the programme and before undertaking any other courses on the programme.

- 2.11 The Review Panel urges that the College monitors the balance of subjects included in the curriculum. In particular it notes that the new programme includes a range of electives which are described as collectively constituting the 'Software Engineering Minor'. The Review Panel encourages the College to give immediate consideration to including these courses as core to the Bachelor in Science in Business Informatics degree in order to enhance the provision of content directly related to informatics.
- 2.12 Teaching and Assessment methods are described in the course specifications but the Review Panel considered that there was a need to develop and promote a Teaching and Learning Policy to give clearer guidance to staff on appropriate use of different approaches to teaching, learning and assessment. The use of Bloom's taxonomy when constructing the Course ILOs helps to demonstrate progression year-on-year and the expectation that students will incrementally develop and demonstrate higher learning skills, but an examination of the content and assessment of the courses does not support the conclusion that this has been done consistently.
- 2.13 The Programme is structured to provide 'exit awards' on successful completion of the first and second years of study (termed Diploma and Associate Diploma respectively). The Review Panel suggests that the College critically reviews the implications of this in terms of the course content undertaken and the programme learning outcomes achieved at each stage. The Review Panel would further recommend that specific programme learning outcomes be developed to correspond with each named award being provided.
- 2.14 In coming to its conclusion regarding the curriculum, the Review Panel notes, *with appreciation*, the following:
- The careful consideration which has been given by the College when formulating revisions to the BSBI programme and in particular the consideration of international benchmarking against curriculum content in the discipline.
 - The programme ILOs are appropriate and are matched to the programme goals.
 - The college's efforts to obtain ECBE accreditation.

- The incorporation of courses (Practicum and Capstone BSBI project) which directly contribute to development of key generic and transferable employability skills.

2.15 In terms of improvement the Review Panel **recommends** that the Department should:

- Ensure that course learning outcomes are consistently mapped to programme learning outcomes and that the stated course objectives and course learning outcomes are aligned.
- Keep under review the balance of courses which comprise the programme and in particular consider the potential to introduce more specific informatics content.
- Develop and promote a Teaching and Learning Policy to give clearer guidance to staff on appropriate use of various approaches to teaching, learning and assessment.
- Ensure consistent nomenclature of courses which are part of the programme.
- Ensure that students complete all remedial courses prior to undertaking any of the other courses which form part of the programme.
- Develop specific programme learning outcomes corresponding to the Diploma and Associate Diploma awards

2.16 **Judgement**

On balance, the Review Panel concludes that the programme **does not satisfy the indicator on curriculum.**

3. Indicator 2: Efficiency of the programme

The programme is efficient in terms of the use of available resources, the admitted students and the ratio of admitted students to successful graduates.

- 3.1 The SER states that in 2009/10 the BSBI programme enrolled 1,140 students to Year 1 and a further 3 students were given direct entry to Year 2 of the programme. It further reports that the total number of students enrolled was 2888 (1342 Full Time and 1546 Part Time). In 2010/11 the programme did not enrol new students. The Review Panel noted that the programme is clearly attracting a large number of students.
- 3.2 The Admission policy is stated but the Review Panel found that it is too general and not consistently documented at the appropriate level of specificity across all printed and web-based documentation. It was noted that the University uses its own admission test (AMACAT) to assess applicants' knowledge of Mathematics and their proficiency in use of the English language, but it was not clear, either in the documentation provided or in discussions with staff, whether the AMA examination has been formally benchmarked against any other standard English language assessment instruments such as IELTS, TOEFL or SAT.
- 3.3 The Review Panel noted that students who fail the AMACAT test may still gain admission and, based on the information provided by the interviewed faculty members and the registrar (and in the absence of any statistical information on the applicant: enrolment ratio) concludes that in practice almost all applicants who have attained a secondary school certificate, can be admitted either directly on to the programme or as 'probationary' students. Probationary students must complete appropriate foundation courses in English and/or Mathematics but are not precluded from undertaking courses for which these are not a pre-requisite. The College should carefully review this practice with respect to its impact on student performance. The Review Panel concludes that there is a need to review the effectiveness of the admission policy and would recommend that a more robust admissions policy is implemented to ensure that applicants demonstrate appropriate skills prior to enrolling on the programme.
- 3.4 During the site visit the Review Panel was informed that the College faculty consisted of 93 (73%) full-time staff and 36 (27%) part-time staff. It further noted that the SER stated that a total of 74 faculty members were involved in teaching the BSBI programme. The programme is taught by staff from the Centre for General Education (General Education), the College of Computer Studies (Information Technology courses) and the College of Administrative and Financial Services (Business and Management courses). The Review Panel considers that the

programme would benefit from a greater diversity of staff and from utilising a greater number of staff who have relevant research based outputs and qualifications in the subject areas in which they teach.

- 3.5 Generally staff teach a minimum of 15 hours, and Heads of Department and Associate Deans teach 12 hours. The SER stated that staff are expected to devote nine hours to research and a further 6 hours on academic advising, each member of staff having an allocation of 20 advisees. While this load complies with the HEC regulations, the Review Panel considers having all faculty members teaching the maximum hours to be an excessive workload and not conducive to supporting staff development needs with respect to engagement in scholarly activity and the stated ambitions of the University to increase the volume and quality of research outputs.
- 3.6 The effort of the University to provide adequate IT facilities is commendable. There are 15 computer laboratories and some of them are specialised, e.g., CISCO, Oracle and SAP, and the Multimedia laboratories.
- 3.7 The library is modest with respect to the numbers of students and staff which it supports. The core textbooks are available for students but ideally a greater range of texts on all subjects which would provide students with the opportunity to read more widely to support their studies is desirable. The Review Panel notes with appreciation the use of e-resources and their adequacy to support student requirements but also notes some concern over quantity of appropriate library resources (both print and electronic format) to support the aspirations of staff and students to engage more in research.
- 3.8 The Review Panel notes that whilst interviewed students praised the university facilities in general they also complained about the fact that they did not have access to the specialised laboratories, such as the Oracle and SAP laboratories, outside scheduled class time and about the lack of study space, especially during examinations. The Review Panel recommends that the University examines ways in which facilities can be timetabled more effectively in order to allow students to benefit from individual and group study spaces.
- 3.9 There is little evidence of any systematic approach to collecting data on the student usage of teaching and learning resources. The Review Panel considers that there is a need for better monitoring of the usage and appropriateness of resources.
- 3.10 The College provides an orientation programme for the new BSBI students including those admitted with advanced entry to the programme. The interviewed students found it beneficial. This is supported by the provision of two Euthenics courses which are compulsory for all students.

- 3.11 Good support is in place through academic advising and staff scheduled hours for contact with students to ensure that they have time to perform this function. The University also provides guidance for students through the University Guidance Office, which complements and extends the work done by academic staff by providing counselling for students who are encountering difficulties in adjusting to the academic environment. The Review Panel finds the academic and non-academic support provided to BSBI students to be appropriate and notes that students who were interviewed expressed particular satisfaction with the accessibility of their lecturers.
- 3.12 Faculty members who were interviewed reported that they did not always have lecturer's copies of the textbooks and had to borrow these from the library. The Review Panel suggests that the College should give consideration to providing better provision of textbooks and other instructional support material to staff.
- 3.13 The statistics available to examine student progression were not detailed enough to perform a thorough cohort analysis. The Review Panel noted that the success rate of students seems quite high and students who were interviewed expressed the view that the examinations, though onerous in terms of quantity, are too easy and did not really provide an effective means to discriminate between levels of achievement.
- 3.14 Facilities for staff are limited. Staff are generally accommodated in an open plan area with restricted space. The Review Panel considers that this space does not provide a conducive environment for personal scholarship and research work. In addition, it is not adequate with respect to providing privacy for meeting with and advising students. Staff interviewed reported that they could use classrooms to meet with students and also observed that the open plan environment promoted enhanced communication. However, on balance, the Review Panel is of the view that the University should consider enhancing staff working accommodation as the current accommodation is not conducive to engaging in activities to support research and scholarly development.
- 3.15 Staff confirmed that support is available to attend conferences or participate in professional development events. Although it was noted that a budget is allocated to conference travel and professional development, there is little evidence of research and professional development activities. More effort is required in this regard. In particular, faculty members can benefit from more training on effective teaching, academic advising and use of IT – particularly in the latter case with respect to effective use of Moodle which has recently been introduced and which has potential to provide a more effective means of facilitating communication both amongst staff and between staff and students.

3.16 In coming to its conclusion regarding the efficiency, the Review Panel notes, *with appreciation*, the following:

- Provision of up-to-date IT laboratories which are appropriate to the needs of BSBI students
- Access to e-resources facilitated by the library
- Good academic advising support and accessibility of teaching staff
- Availability of student counselling services for students who encounter difficulties during their studies

3.17 In terms of improvement, the Review Panel **recommends** that the Department should:

- Ensure that the AMACAT Entrance Examination is internally and externally validated to ensure accurate assessment is made of students' ability in Mathematics and English language
- Maintain detailed records of the number of applicants to the number of students who are accepted.
- Adopt and accurately communicate a more robust admissions policy which ensures that applicants are fully equipped with appropriate skills
- Employ a more diverse faculty who possess appropriate academic qualifications in the specific courses which they deliver
- Review the working accommodation and workload of staff to ensure that they are provided with appropriate time and access to physical resources to allow them to engage fully in research and scholarly activity
- Investigate and implement procedures to ensure better management of access to physical resources by students outwith scheduled teaching times
- Implement procedures to monitor the usage and appropriateness of resources
- Ensure that procedures are in place to monitor the progression of student cohorts to inform decision-making.

3.18 **Judgement**

On balance, the Review Panel concludes that the programme **does not satisfy the indicator on efficiency of the programme.**

4. Indicator 3: Academic standards of the graduates

The graduates of the programme meet acceptable academic standards in comparison with equivalent programmes in Bahrain and worldwide.

- 4.1 As noted in Indicator 1 the curriculum provides clear and appropriate programme goals and these are translated into appropriate programme intended learning outcomes. However, the inconsistencies in the course specifications and in the mapping of course learning outcomes to programme learning outcomes make it difficult to provide an assurance that attainment of the programme ILOs is met.
- 4.2 There is clear evidence of benchmarking activities with both other academic institutions and with employers and the programme benefits from external advice provided by the European Council for Business Education who perform the function of an external examiner for the programme. There does not, however, appear to be a clear rationale informing the choice of benchmark institutions which have been selected and this can lead to confusion because the programme is attempting to assimilate practices from other institutions without necessarily fully taking into account the context in which the different institutions have developed and are implementing these practices.
- 4.3 External benchmarking of standards, particularly with respect to attainment of graduate attributes for employability, is also provided by the Program Industry Advisory Panel.
- 4.4 The Review Panel was informed that employers are involved in an 'external examining' role in confirming the standards of work produced as projects. However, the basis on which the external examiners made judgements and provided feedback was not clear. There is evidence of internal moderation but the Review Panel recommends that a more formal and systematic approach be taken to appointing external examiners who are suitably qualified to undertake the role of ensuring that appropriate standards are achieved in assessed work across the programme.
- 4.5 The course specifications provide details on the manner in which students are to be assessed but do not provide details on the criteria which will be used to assess their work nor the extent to which achievement of these criteria will contribute to their overall mark/grade.
- 4.6 The Review Panel examined samples of student work and is of the view that in some of these the quality of the work submitted does not merit the grade achieved. Furthermore the Review Panel is concerned that, whilst the breadth of the work demonstrates coverage of the programme intended learning outcomes it does not demonstrate sufficient depth. Students confirmed that they find the assessments for

most courses to be generally easy but that the volume of assessment is very high. The Review Panel suggests that more time be devoted in the delivery of the curriculum and a variety of pedagogical approaches be used to ensure that students gain a deep knowledge and understanding of the courses which they undertake and that assessments should be graded on the basis that students can clearly demonstrate a deeper understanding of the subject.

- 4.7 The statistics on student achievement for graduate performance showed a clear bias towards higher grades of excellent and very good. The reasons for this should be clearly investigated by staff delivering the programme and the College should carefully examine the criteria for grading student assessments.
- 4.8 The Review Panel met with employers and alumni and both expressed satisfaction with the level of skills and preparation for employment of the graduates from the programme. In particular the employers were appreciative of the generic communications and interpersonal skills of the graduates but noted a gap in creativity and problem solving skills. Alumni confirmed that their communication skills in English were considerably enhanced during their studies because of rigorous insistence that English be used in all communications with staff.
- 4.9 In coming to its conclusion regarding the academic standards, the Review Panel notes, *with appreciation*, the following:
- A clear commitment to benchmarking provision against external institutions
 - The use of a Programme Industry Advisory Panel
 - The development of students' interpersonal and communication skills which are seen as a key graduate attribute by employers.
- 4.10 In terms of improvement, the Review Panel **recommends** that the Department should:
- Develop a clear rationale for benchmarking activities and select appropriate comparable institutions against which to perform benchmarking
 - Ensure a more formal and systematic approach be taken to obtaining feedback from external examiners who are suitably qualified to undertake the role
 - Review the mechanism for setting and grading assessments which test students' ability to demonstrate higher order learning and ensure that suitable grading criteria are specified and made clear to students to allow more transparency and justification for the grades awarded

- Ensure that the assessments are appropriately designed to provide a more accurate discrimination between standards of performance of students to avoid grade inflation
- Develop and implement a more systematic approach to comparing the standards achieved by graduates with those achieved by graduates of other comparable institutions – both locally and globally
- Ensure that more time is devoted in the delivery of the curriculum to ensure that students gain a deep knowledge and understanding of the courses which they undertake and that assessments are tailored to ensure that students can clearly demonstrate a deeper understanding of the subject.

4.11 Judgement

On balance, the Review Panel concludes that the programme **does not satisfy the indicator on academic standards of the graduates.**

5. Indicator 4: Effectiveness of quality management and assurance

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

- 5.1 The University has a Quality Assurance and Accreditation Office which reports directly to the Office of the University President to approve and implement appropriate actions. The Office is active not only in promoting and disseminating quality assurance procedures to staff and students but is also mandated to conduct periodic monitoring of quality procedures and submit summary reports to the College and Departmental Offices. The Panel notes that there is a clear commitment by the QAAO to support the College in achieving enhanced quality procedures.
- 5.2 The College disseminates its policies, procedures and regulations through its Policies and Procedures Manual, and Staff and Student Manuals. The Review Panel, however, found evidence that some policies and procedures are not clearly disseminated or comprehended by staff. The University has recognised the need to carefully monitor improvement plans in the College of Administrative and Financial Sciences in its Gap Analysis reported in the SER. The Review Panel would recommend that this is addressed as a matter of urgency. The Review Panel would also recommend that the Moodle facility which the college has recently implemented be used as an effective platform to ensure timely dissemination of changes in policies and procedures, which is important particularly in the context of the rapid pace of development and change in this area.
- 5.3 Student Satisfaction Surveys are conducted and the results of these were made available to the Review Panel. The College also provided a useful comparative analysis which allowed the Review Panel to compare responses over the two years in which the surveys have been administered. The feedback form used allowed students to comment on a broad range of issues relating both to their academic studies and the general teaching and learning environment. Students who were interviewed were generally positive about the willingness of the College to act on suggestions. The Review Panel noted that the students were not always aware of some of the improvements which had been made to address their concerns. The College should take care to 'close the loop' by implementing an effective strategy to ensure that students are kept fully informed of planned future changes and developments.
- 5.4 Employers are surveyed and there is clear evidence of their involvement both with the College as a whole and in an external advisory capacity for considering the programme structure of the BSBI.

- 5.5 There is a clear system in place at both the University and College level for Strategic Planning. The University and College have clearly identified Key Performance Indicators, and have in place an effective mechanism to review performance against these on a monthly basis and provide summary outcomes through an Annual Accomplishment Report.
- 5.6 Faculty and Departmental meetings are held regularly and staff noted satisfaction with the manner in which they could contribute to these meetings.
- 5.7 Professional development needs are identified through use of Training Needs Assessments and through a systematic collection of staff feedback during regular staff performance reviews. These inform a Faculty and Staff Development Plan. The Review Panel notes that whilst there are some good examples and a clear intention to develop staff there is still a significant need for enhanced support to achieve the goals of the College.
- 5.8 In coming to its conclusion regarding the effectiveness of quality management and assurance, the Review Panel notes, with appreciation, the following:
- The commitment demonstrated the Quality Assurance and Accreditation Office to facilitate quality assurance and enhancement and providing support for staff
 - The general clarity of its policies and procedures
 - Clear mechanisms to identify staff development needs
 - The involvement of different stakeholders including students, employers and industry advisory panel in the evaluation and improvement of the programme's structure and its delivery.
- 5.9 In terms of improvement, the Review Panel **recommends** that the Department should:
- Ensure that its policies and procedures are not only disseminated but also comprehended and implemented by all staff
 - Provide enhanced mechanisms to monitor improvement plans developed at the University/College level to enhance programme delivery
 - Ensure students are kept fully apprised of planned future changes and developments and specifically communicate any changes which are being made in response to comments arising from student surveys

- Provide enhanced support for staff – particularly in empowering them to achieve the ambitions of the College to improve its research profile.

5.10 Judgement

On balance, the Review Panel concludes that the programme **satisfies the indicator on effectiveness of quality management and assurance.**

6. Conclusion

Taking into account the institution's own self-evaluation report, the evidence gathered from the interviews and documentation made available during the site visit, the Review Panel draws the following conclusion in accordance with the *HERU/QAAET Program Review Handbook, 2009*:

There is no confidence in the Bachelor of Science in Business Informatics offered by the AMA International University - Bahrain.