

الهيئة الوطنية
للمؤهلات وصنمان جودة التعليم والتدريب
National Authority for Qualifications &
Quality Assurance of Education & Training



Directorate of Higher Education Reviews

Programmes-within-College Reviews Report

**Bachelor in Distributed Systems and Multimedia
College of Information Technology
Ahlia University
Kingdom of Bahrain**

Date Reviewed: 6–9 October 2013

HC019-C1-R019

Table of Contents

Acronyms.....	2
1. The Programmes-within-College Reviews Process	3
2. Indicator 1: The Learning Programme	7
3. Indicator 2: Efficiency of the Programme	11
4. Indicator 3: Academic Standards of the Graduates	15
5. Indicator 4: Effectiveness of Quality Management and Assurance.....	20
6. Conclusion.....	24

Acronyms

ACID	Ahlia Center for Information and Documentation
ATDC	Ahlia Training and Development Center
AU	Ahlia University
BSDSM	Bachelor in Distributed Systems and Multimedia
BSIT	Bachelor in Information Technology
CAQA	Centre for Accreditation and Quality Assurance
CME	Center for Measurement and Evaluation
DHR	Directorate of Higher Education Reviews
HEC	Higher Education Council - Kingdom of Bahrain
ILO	Intended Learning Outcome
MITCS	Master in Information Technology and Computer Science
QQA	National Authority for Qualifications & Quality Assurance of Education & Training
SER	Self-Evaluation Report
TLC	Teaching and Learning Committee

1. The Programmes-within-College Reviews Process

1.1 The Programmes-within-College Reviews Framework

To meet the need to have a robust external quality assurance system in the Kingdom of Bahrain, the Directorate of Higher Education Reviews (DHR) of the National Authority for Qualifications & Quality Assurance of Education & Training (QQA) has developed and is implementing two external quality review processes, namely: Institutional Reviews and Programmes-within-College Reviews which together will give confidence in Bahrain's higher education system nationally, regionally and internationally.

Programmes-within-College Reviews have three main objectives:

- to provide decision-makers (in the higher education institutions, the QQA, the Higher Education Council (HEC), students and their families, prospective employers of graduates and other stakeholders) with evidence-based judgements on the quality of learning programmes
- to support the development of internal quality assurance processes with information on emerging good practices and challenges, evaluative comments and continuing improvement
- to enhance the reputation of Bahrain's higher education regionally and internationally.

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

Indicator 1: The Learning Programme

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

Indicator 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.

Indicator 3: Academic Standards of the Graduates

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

Indicator 4: Effectiveness of Quality Management and Assurance

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

The Review Panel (hereinafter referred to as ‘the Panel’) states in the Review Report whether the programme satisfies each Indicator. If the programme satisfies all four Indicators, the concluding statement will say that there is ‘confidence’ in the programme.

If two or three Indicators are satisfied, including Indicator 1, the programme will receive a ‘limited confidence’ judgement. If one or no Indicator is satisfied, or Indicator 1 is not satisfied, the judgement will be ‘no confidence’, as shown in Table 1 below.

Table 1: Criteria for Judgements

Criteria	Judgement
All four Indicators satisfied	Confidence
Two or three Indicators satisfied, including Indicator 1	Limited Confidence
One or no Indicator satisfied	No Confidence
All cases where Indicator 1 is not satisfied	

1.2 The Programmes-within-College Reviews Process at Ahlia University

A Programmes-within-College review of the College of Information Technology was conducted by the DHR of the QQA in terms of its mandate to review the quality of higher education in Bahrain. The site visit took place on 6–9 October 2013 for the academic programmes offered by the College, these are: Bachelor in Information Technology; Bachelor in Distributed Systems and Multimedia; and Master in Information Technology and Computer Science.

This report provides an account of the review process and the findings of the Panel for the Bachelor in Distributed Systems and Multimedia (BSDSM) based on the Self-Evaluation Report (SER) and appendices submitted by Ahlia University (AU), the supplementary documentation made available during the site visit, as well as interviews and observations made during the review site visit.

AU was notified by the DHR/QQA on 15 May 2013 that it would be subject to Programmes-within-College reviews of its College of Information Technology with the site visit taking place on 6-9 October 2013. In preparation for the review, AU conducted its college self-evaluation of all its programmes and submitted the SER with appendices on the agreed date on 15 July 2013.

The DHR constituted a panel consisting of experts in the academic field of Information Technology and in higher education who have experience of external programme quality reviews. The Panel comprised four external reviewers.

This Report records the evidence-based conclusions reached by the Panel based on:

- (i) analysis of the Self-Evaluation Report and supporting materials submitted by the institution prior to the external peer-review visit
- (ii) analysis derived from discussions with various stakeholders (faculty members, students, graduates and employers)
- (iii) analysis based on additional documentation requested and presented to the Panel during the site visit.

It is expected that the AU will use the findings presented in this report to strengthen its BSDSM programme. The DHR recognizes that quality assurance is the responsibility of the higher education institution itself. Hence it is the right of AU to decide how it will address the recommendations contained in the Review Report. Nevertheless, three months after the publication of this Report, AU is required to submit to the DHR an improvement plan in response to the recommendations.

The DHR would like to extend its thanks to AU for the co-operative manner in which it has participated in the Programmes-within-College review process. It also wishes to express its appreciation for the open discussions held in the course of the review and the professional conduct of the faculty in the BSDSM programme.

1.3 Overview of the College of Information Technology

The College of Information Technology (IT) at Ahlia University prepares students to become professionals in the field of IT and computer sciences skilled in all facets of the domain of IT including hardware, software, programming and Mathematical Algorithms.

Emphasis is given to a hands-on approach to computing that combines academic excellence and research in an innovative way enabling students to perform a broad panoply of IT tasks with high competence. The College offers three programmes: Bachelor in Distributed Systems and Multimedia, Bachelor in Information Technology and Master in Information Technology and Computer Science.

1.4 Overview of the BSDSM Programme

The programme under review, the Bachelor in Distributed Systems and Multimedia (BSDSM) has been operating since the academic year 2008-2009 by the College of IT. The programme consists of 132 credits (44 courses) and is administered through the Department of Multimedia Science. A key component is the undergraduate project, a capstone course in the curriculum, in which students use multimedia tools to address a design issue with vocational application.

In the past four academic years, 34 students were admitted to the programme, 24 on a full-time basis and 10 on a part-time basis comprising 31 Bahrainis, two GCC and one Arab national.

Since the inception of the programme, 48 students have graduated and a large percentage of those graduates have taken up positions in the field of multimedia. Many have gone on to responsible positions in the fields of web development and interactive enterprise software development. The current number of students actively participating in the BSDSM programme is 36.

In relation to the programme 10 full-time academic staff are contributing to the programme in addition to six full-time administrative staff.

1.5 Summary of Review Judgements

Table 2: Summary of Review Judgements for the BSDSM Programme

Indicator	Judgement
1: The Learning Programme	Satisfies
2: Efficiency of the Programme	Satisfies
3: Academic Standards of the Graduates	Satisfies
4: Effectiveness of Quality Management and Assurance	Satisfies
Overall Judgement	Confidence

2. Indicator 1: The Learning Programme

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

- 2.1 AU has clear mission and vision statements and both are accessible to all staff and students on its website. They are also contained in the university's strategic plan. The BSDSM programme aims are clearly identified and described within the programme specification. The link between the programme aims and the mission and vision is implicitly rather than explicitly stated. The College may wish to ensure that the link is explicitly documented.
- 2.2 The programme specification demonstrates that the curriculum is organized to provide academic progression course-by-course, by identifying the prerequisite required for each course. In general, the knowledge and skills being developed are appropriately balanced within each course and between theory and practice. Students confirmed in interviews their satisfaction with the programme and the content was what they expected when they joined the College. During interview sessions with graduates the Panel heard that the inclusion of courses based upon professional certification (e.g. from Microsoft) was a good feature of the curriculum, but that they would have liked to have seen more supervised practice in the laboratory-based courses. The Panel appreciates that the curriculum provides academic progression.
- 2.3 The course syllabi are generally well presented and use a standard template designed by the Teaching and Learning sub-committee. Each syllabus includes comprehensive information relating to the curricular content and the delivery of the course. This information includes: the ILOs, the course structure (in which teaching sessions are mapped to their respective ILOs), teaching materials and the assessments and their weightings. All course syllabi are formally verified on a regular basis and the outcomes are documented. The Panel appreciates both the use of a standard template for course syllabi and the regular formal verification of course syllabi.
- 2.4 Programme ILOs are documented in the programme specification and are well defined and specified at an appropriate level. The Teaching and Learning sub-committee recently reviewed the programme ILOs and reported that there needs to be some modification to the verbs used in some of the ILOs to ensure that they are at an appropriate level.
- 2.5 Course ILOs are documented in the course syllabi and are well-defined and specified at an appropriate level. The Teaching and Learning sub-committee sampled some course syllabi and reported the need for similar modifications to some course ILOs to those for programme ILOs. The course ILOs have been mapped to the programme

ILOs and this is documented in a 'curriculum skills map'. Staff reported during interviews that they had received training in ILOs and 19 attended a workshop in March 2013. The Panel appreciates the development of college staff in ILOs at a recent training workshop. However, although students were aware of the existence of course ILOs through the mapping of relevant ILOs to teaching sessions in the course syllabi, they have not experienced the use of them by faculty members during teaching and assessment. The Panel suggests that faculty members actively use course ILOs with students during teaching and assessment activities.

- 2.6 The programme has an optional internship which is available to all students who have completed 90 or more credits and have a minimum university GPA of 2.00. Students receive six credits upon successful completion of their internship. The internship requires a minimum of 180 hours of work. AU has guidelines for the internship programme which includes a section on the evaluation and grading of internship students. There is a course specification for the internship which includes ILOs. The Panel appreciates the inclusion of an internship opportunity for students.
- 2.7 The ILOs are not explicitly linked to the evaluation criteria contained in each of the evaluation forms and the student's report, which contribute to the final grading of the student. The Panel recommends the College review the internship ILOs to ensure they are measurable and to link these ILOs explicitly to the evaluation criteria in the internship evaluation forms. The list of students who have attended an internship produced by the Deanship of Student Affairs show that six BSDSM students attended an internship in 2012-2013. In interviews, graduates reported that their internship experience had increased their employment potential. While the Panel understands the concerns of the College about finding enough internship placements for all students, it recommends that the College develop a strategy aimed at substantially increasing the number of available placements.
- 2.8 AU has an up-to-date Teaching and Learning Plan, which includes objectives 'to promote and support excellence in teaching and learning', which the Panel appreciates. Course files identify that a good range of teaching and learning methods is being used throughout the programme including lectures, debates, practical sessions, use of case studies, group working, presentations and projects. The students reported during interviews that they rated highly the teaching provided to them by their teachers. They highlighted the e-learning available through AU's Moodle virtual learning environment (VLE) as one of the best features of their experience at AU. The students commented that each faculty member has a course site in the system and are very active in ensuring the learning materials and student activities are available and up-to-date. Graduates also indicated their appreciation of Moodle. Training on Moodle and its use has been provided for faculty members. The Panel was given a demonstration of the use of Moodle by faculty members and was impressed by the extent of the materials and activities available to students but also by the obvious enthusiasm of the faculty members

towards the use of Moodle. The Panel appreciates the use of Moodle for e-learning and the enthusiasm of faculty and students in using it.

- 2.9 AU has published a range of guidance to staff on student assessment including a Student Assessment Manual and Guidelines for Undergraduate Projects and Guidelines for Undergraduate Internship Programme. The assessment manual includes a useful ILO-Assessment Matrix which is used as a guide to aligning assessment with programme and course ILOs. The SER reports that the Centre for Accreditation and Quality Assurance monitors the implementation of the Student Assessment Manual and ensures its implementation across AU. The Student Assessment Manual is regularly reviewed by the Committee of Assessment, which amends the manual accordingly. The most recently amended version of the manual was approved in May 2012. Assessment policies are made available to students through the Student Guide, AU's website and AU's Catalogue.
- 2.10 The course syllabuses contain an outline of the assessment tasks planned and their weighting. In general, the assessment methods being used include: the final examination, mid-term examination, quizzes, assignments, homework and small projects. Graduates reported that the course on Website Design included a practical examination in the final examination, which made the assessment more practical. The Panel appreciates the various assessment guides and the variety of assessment activities that are used.
- 2.11 During the scrutiny of assessment briefs and their marking, the Panel found no explicit evidence of the alignment of course ILOs to the individual assessment tasks/questions or reference to ILOs in the marked student work. The Panel recommends that the College ensure the explicit alignment of ILOs to the individual assessment tasks/questions within each course assessment brief. The two course external examiners have made similar comments relating to this issue. The Panel found little evidence of written feedback to students on their work. Most faculty members reported that they provide students with oral feedback on their work in class, to the whole group, and they also offer students individual oral feedback. This practice was confirmed in interviews by both students and graduates. The Panel encourages the College to ensure that all students receive written feedback identifying strengths and weaknesses in their work, and improvements to be made to their future work.
- 2.12 In coming to its conclusion regarding The Learning Programme, the Panel notes, *with appreciation*, the following:
- The curriculum is well organized to provide academic progression.
 - A standard template for course syllabi is used and there is regular formal verification of course syllabi.
 - Course ILOs are well defined and specified at an appropriate level.

- There is a well-developed Teaching and Learning Plan.
- Moodle is well used for e-learning.
- There are implemented assessment guides and a variety of assessment activities are used.

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

- review the internship ILOs to ensure they are measurable and link explicitly these ILOs to the evaluation criteria in the internship evaluation forms
- develop a strategy aimed at substantially increasing the number of available internship placements
- ensure the explicit alignment of ILOs to the individual assessment tasks/questions within each course assessment brief.

2.14 **Judgement**

On balance, the Panel concludes that the programme **satisfies** the Indicator on **The Learning Programme**.

3. Indicator 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.

- 3.1 The overall university-wide admission policy is rather liberal and the specific requirements for IT-oriented programmes such as BSDSM is less clear in the SER. The mean Tawjihia score of 79.2% mentioned in the SER is on the low side. As a mean, it does not impose a lowest acceptable level. The Panel recommends that an explicit and publicised lower limit be imposed for the BSDSM programme. Potential students on the BSDSM programme take multiple-choice placement tests in English and Mathematics to help ensure suitability. Mathematics is particularly important for the BSDSM programme and the pass mark in the placement test is only 50%. The English skills of some students interviewed were of a concern to the Panel given that the degree programme is taught completely in English. The Panel suggests that the College review its placement tests to ensure the appropriateness of students on the BSDSM programme.
- 3.2 The Panel was pleased to find that students with special needs are considered and adjustments made to provide support to such students. During interviews with management and staff it emerged that only certain disabilities are currently covered where reasonable adjustments can be made.
- 3.3 There are clear lines of accountability with regard to the management of the programme in the College of IT. The clarity and detail of the university and college organisational charts could be improved. The clarity of decisions (or actions) in minutes of meetings, particularly with regard to the recording of the implementation of decisions in subsequent meetings, could be more explicitly recorded in the minutes to improve transparency of the management. In practice, this is documented in letters. During the interviews, it was evident that faculty members understood the processes well.
- 3.4 Faculty CVs were provided at the time of the site visit. The majority have PhDs in Computer Science, while some are in related fields or at Master level. Timetables for faculty members for previous semesters were also provided during the site visit. Some are on the high side, but acceptable. The staff-student ratio quoted in the SER is improved by including staff with an administrative role as well as lecturers as evidenced during discussions with staff. In general, faculty members are appropriate for the BSDSM programme.
- 3.5 The recruitment of staff already at AU (e.g., part-time staff becoming full-time staff) could be more transparent, as reported during interviews with faculty members. Appraisal processes are in place, but there have been no promotions in the College of IT in recent years. This may indicate a lack of time available to faculty members to

achieve the required research criteria for promotion, due to teaching load for example. Adequate research time is important for the professional development of faculty members. Staff appointments are documented, but there is no exit documentation on why staff leave. There is a formal documented induction procedure for staff. The Panel recommends that the College ensure that academic staff have adequate time to conduct research in order to keep abreast with new knowledge in their discipline.

- 3.6 The ADREG system at AU is a useful and flexible management information system Faculty members use the system to track students' achievements, including at-risk students. There is a dedicated team at AU to add new features to the ADREG system when required. The Panel found this to be a very helpful system for the effective running of AU.
- 3.7 AU has a server backup and restore procedure, including disk backup and tape backup in a secure location both on-site and off-site. Student files are stored in filing cabinets on-site in the Office of Administration and Registration, but are also scanned electronically. Student results are verified by the instructor, chairperson, and dean according to the SER. A quality assurance (QA) data officer also monitors the process. However, there is no second-marking of assessed work or examinations in general (apart from final year projects/dissertations), as evidenced by assessed work and examination scripts viewed on-site. Thus, the accuracy of marking at this level is not checked. It is recommended that a policy/procedure be developed for checking and monitoring of the marking of student work in assessments and examinations.
- 3.8 The available resources in terms of IT laboratories and classrooms (including some with smart boards) are adequate with respect to BSDSM programme student needs. There are specific additional multimedia laboratory facilities to support the BSDSM programme. However, there is no matching distributed systems laboratory for the BSDSM programme and it is recommended that such a laboratory be provided to support additional distributed systems courses. IT laboratories have an open door policy when not in use and laboratory assistants are available. Formal class utilization of IT laboratories leaves adequate time for students to use the facilities during free periods.
- 3.9 The library provides study space, although this could be larger, especially if student numbers expand. Digital resources are provided. Although modest in scale, they are appropriate for a university of the size of AU. Wi-Fi access is available throughout the campus, a particularly important facility for IT students. During interviews the Panel found that there is general student satisfaction with all these aspects of provision.

- 3.10 The ADREG system tracks laboratory and classroom usage. Usage of library resources is tracked separately. Student usage levels in laboratories are tracked. The Moodle VLE has its own tracking report facilities.
- 3.11 There is a head librarian and support team enabling adequate opening hours and support in the library. Laboratory assistants are available in the laboratories. Moodle is used to provide electronic resources for all courses. As well as standard resources such as slides and notes, some courses use facilities such as online student discussions. Students are allocated an academic advisor. The Panel found during interviews with students that this system works well with a good amount of contact and support. The ADREG system effectively supports students who do not maintain contact and when they become at risk. The advising support provided is above average with appropriate policies and procedures. During the site visit, the Panel met with the student counsellor and found that counselling is available for issues that are more serious. Students with special needs are also supported.
- 3.12 Adequate orientation is provided for new students. However, during interviews with students the Panel found that a significant number of students miss the induction. The Panel suggests that the institution consider making attendance at orientation compulsory. The programme currently has a significant number of French transfer students from the *École pour l'informatique et les nouvelles technologies* (EPITECH), Paris. In discussion with some of these students, their potentially difficult orientation needs have been handled well by AU.
- 3.13 During the site visit the Panel found many students admitting to photocopying textbooks for course. As this is a violation of copyright, the Panel recommends that the institution urgently find ways to end this activity.
- 3.14 There is a policy for supporting at-risk students. The advising system at AU, in combination with the ADREG system, provides an effective mechanism for detecting and dealing with at-risk students, at least initially. However, the Panel noted there are students who have been at AU for a significant period due to problems. This needs to be addressed.
- 3.15 An IT Club that organizes events such as lectures is available to students and there is evidence of attendance, both verbal from students' interviews and in the form of a register. There are a number of other extra-curricular opportunities for students (e.g., foreign trips by some students. While the Panel acknowledges these the amount and type of student activities is limited by AU's location and that it has no outdoor facilities. While a planned new campus will improve the situation, this is several years away.
- 3.16 In coming to its conclusion regarding the Efficiency of the Programme, the Panel notes, *with appreciation*, the following:

- Students with special needs are considered at AU.
- There are clear lines of accountability with regard to the management of the BSDSM programme.
- ADREG is a useful, well-liked and flexible management information system.
- IT equipment is adequate with good access and multimedia support.
- The Moodle VLE has been fully embraced by both faculty and students.
- The student advising system works well.
- The orientation programme is an important feature at AU.
- There are a number of other extra-curricular opportunities for students.

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

- have an explicit and publicised lower limit on the Tawjihia score for admission to the BSDSM programme
- establish a specialist laboratory to support distributed systems
- ensure that academic staff have adequate time to conduct research in order to keep abreast with new knowledge in their discipline
- put in place measures to ensure that photocopying of textbooks by students cease.

3.18 **Judgement**

On balance, the Panel concludes that the programme **satisfies** the Indicator on **Efficiency of the Programme**.

4. Indicator 3: Academic Standards of the Graduates

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

- 4.1 AU's Teaching and Learning Plan includes a set of generic skills and knowledge statements, referred to as graduate attributes, that AU expects all of its graduates to achieve. These are stated in terms of ILOs. The Teaching and Learning Plan states that each College should form 'a generic graduate profile that is college specific'. The Panel encourages the College to derive specific graduate attributes from these generic AU ones. The Panel appreciates AU's generic graduate profile.
- 4.2 The SER states that as the 'BSDSM programme is a hybrid of IT, distributed systems and multimedia design no single external reference point has been deemed apt'. Instead the 'programme has been verified through a benchmark study of [some] international universities'. Scrutiny of the benchmark study report shows that an identification of matching course content between the AU programme and the identified international university has been done. The data that has been collected has been analysed but it is unclear what the College plans to do regarding making changes to the BSDSM programme in response to the outcomes from this benchmarking study. The Panel appreciates the work done by the College during the conduct of the benchmark study. The Panel suggests that the College finalize quickly its conclusions and any actions to be taken.
- 4.3 AU is responsible for publishing the assessment policies and procedures in its Student Assessment Manual. AU also publishes various other documents related to assessment including: Guidelines for the Undergraduate Project and Guidelines for Undergraduate Internship Programme. The SER reports that the Centre for Accreditation and Quality Assurance monitors the implementation of the Student Assessment Manual and ensures its implementation across AU. The Student Assessment Manual is regularly reviewed by the Committee of Assessment, which amends the manual accordingly. The most recently amended version of the manual was approved in May 2012. The SER reports that assessment policies are made available to students through the Student Guide, AU's website and AU's Catalogue.
- 4.4 AU's Student Assessment Manual states that all final examinations should be subject to verification and a standard form is provided for this purpose. The main purpose of verification is to determine whether or not the proposed examination paper is aligned with the respective aims, objectives and ILOs being assessed by the examination. College staff reported that verification is undertaken by a committee of three people who verify that both the ILOs being assessed by the examination and the marking criteria to be used are valid. However, the Panel has not seen any

evidence of the explicit alignment of assessments with the ILOs being assessed. Hence, it is unclear how the committee can function effectively. The Panel concludes that there is a need for greater transparency to the present process. AU plans to extend the verification process to all course assessments. This is to be welcomed as it will enable the verification process to additionally verify that all course ILOs are being assessed, and improve the overall effectiveness of assessment. The Panel recommends that the College ensures greater transparency in the internal verification process.

- 4.5 AU's Student Assessment Manual states that traditionally internal moderation of each final examination paper is conducted by the Chairperson of the Department. However, in the case of the College internal moderation is conducted by a committee of three (including the respective course lecturer). The Student Assessment Manual explains that the purposes are firstly, to ensure that the distribution of final grades is near normal, and secondly, to discuss borderline pass-fail cases with the lecturer. If necessary, changes may be made to the final grade for the entire class or individual students. The Panel was provided with an exemplar of a completed internal moderation form, which identified a sample of three scripts used, i.e. highest, average and lowest. The questions asked on the form about the marking were answered with a yes/no response. However, it was not clear whether or not the committee discussed any borderline pass-fail cases with the lecturer. Whatever the outcome, it should be recorded on the form. Also, if any changes are made either to the final grade for the entire class or individual students these should be also recorded on the form. Staff reported that AU plans to extend internal moderation to all assessments. The Panel appreciates the moderation process and welcomes plans to extend it.
- 4.6 AU's Student Assessment Manual indicates that an external evaluator is appointed to evaluate annually each programme's aims, objectives, ILOs, curriculum, the final examination and its marking. A document from the Dean's Office explains the difficulties experienced by the College during 2012-2013 in recruiting an external assessor for the programmes, but reports that three external assessors were finally approved on the 25 September 2013. The Panel received copies of a number of course reports from two different external assessors – neither of the two names on these course reports coincide with the names in the Dean's document. The completed forms did not explicitly identify the relevant programme(s) and the forms used by the externals were not the same as the form included in Appendix 4 of AU's Student Assessment Manual and were far less comprehensive. The Panel recommends that the College should fully implement AU's external examiner/assessor/evaluator arrangements.
- 4.7 Resulting from the scrutiny of both assessment briefs and the marking of the student work, the Panel had a general concern about the over-reliance on the use of multi-choice, especially in the higher level courses. The Panel expected to see a greater

number of more challenging types of questions. The Panel recommends that the College ensure consistency in the assessments associated with each course, and the overall assessment profile for each course aligns with its ILOs.

- 4.8 The SER contains a range of statistical information about admitted students, successful graduates and destination of graduates for the last three years. However, this data is not presented in a way that enables the performance of each of the three cohorts of admitted students to be accurately evaluated in terms of progression, retention, successful graduates and destination of graduates. The College is encouraged to present the data in future years by cohort as described above. However, it is possible to comment on the individual figures given in the SER. The number of admitted students to BSDSM for the last three years is very low, although the extent of commonality with BSIT makes the small cohorts more viable. There have been 30 successful graduates over the last three years, which is reasonable given the recent intakes. However, the graduate first destination statistics look less reasonable with only about 25% of graduates in appropriate employment.
- 4.9 In AU's guidance for the internship there is a clear statement of the roles and responsibilities in the management of an internship, including the student, academic supervisor, chairperson and internship coordinator. The guidance also includes a clearly defined process including the registration of the student for the internship programme, finding a suitable internship position for the student with an employer, the assignment of both an academic supervisor and a worksite supervisor and the arrangements for the assessment of the student's performance during the internship. The assessment of each student is derived from a number of evaluations by the academic supervisor and worksite supervisor, together an evaluative report from the student. However, it was unclear to the Panel as to how these various separate evaluations are combined into the one final pass/fail grade. The College needs to make this explicit in the guidelines. The Panel recommends that the College ensure that the process for combining the separate individual evaluations of a student's internship into the one final pass/fail grade is transparent. Students and graduates met by the Panel were very enthusiastic about their internships, and reported how appropriate their learning experiences had been to their programme.
- 4.10 AU's Guidelines for Undergraduate Projects contains generic aims for the project and a clear statement on the rules and responsibilities of the supervisor and student. It also includes a useful flowchart detailing the stages from the students' registration for the project through to the examination of the project. The latter includes each student both submitting a project report and undergoing an oral examination. A standard marking rubric for both the project report and the oral examination are included in the guidelines. Three examiners, including the supervisor, are required to individually assess each project and its associated oral using the two rubrics. Unfortunately, the Panel had access to only one student completed marking rubrics.

The Panel encourages the College to ensure the full transparency of the marking process by requiring examiners to justify the marks given.

- 4.11 The SER reports that the College, in collaboration with the College of Engineering, has established an Advisory Board during 2012-2013. AU has produced a Roles and Responsibilities of College External Advisory document. Excluding AU officers, the membership can include up to 15 members. The Panel met five members of the Board. They reported that the Board has 12 members and they have met every month for the last year, plus some additional sub-groups had also met. They have appreciated the strong commitment from the President and senior staff. In the Panel's discussion with the members, it became clear that they have very significant experience relevant to the College's programmes. The Panel appreciates the establishment and the consistent work of the Advisory Board and its suggestions for improvement which have been incorporated in the programme.
- 4.12 The Panel met with about 20 Bachelor's graduates and four employers. The graduates reported that they were all employed in IT, including a number in multimedia. They also reported that some of the good features of their programme included: the extra-curricular activities; the opportunity to achieve some professional certifications, e.g. from Microsoft; the use of Moodle; their employment by AU as laboratory assistants to support newer students; and the practical examination in the final examination of the Web Applications Design course. The graduates' enthusiasm for their programmes suggested an overall high satisfaction with their AU experience. The employers reported their clear satisfaction with having recruited BSDSM graduates over recent years. The SER reports a satisfaction level of 76.4% being registered by graduates and 88.3% by employers in recent surveys. The Panel appreciates the high satisfaction rates for graduates and employers.
- 4.13 In coming to its conclusion regarding the Academic Standards of the Graduates, the Panel notes, *with appreciation*, the following:
- There is a set of generic graduate attributes.
 - There is internal moderation of final examinations with plans to verify and moderate all course assessments.
 - A benchmark study has been conducted.
 - There is a well-experienced working Advisory Board.
 - The College has high satisfaction rates of graduates and employers.
- 4.14 In terms of improvement, the Panel **recommends** that the Department should:
- ensure greater transparency in the internal verification and moderation processes
 - fully implement external examiner/assessor/evaluator arrangements

- ensure consistency in the assessments associated with each course, and the overall assessment profile for each course aligns with its ILOs.

4.15 **Judgement**

On balance, the Panel concludes that the programme **satisfies** 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 and continuous improvement, contribute to giving confidence in the programme.

- 5.1 AU has a well-defined structure of governance in charge of the implementation of policies, procedures and regulations. This structure includes the Board of Directors, Executive Committee, Board of Trustees, External Advisory Boards, University Council, College Councils, Department Councils, along with standing committees and selected university-wide committees such as the Teaching and Learning Committee (TLC). Broadly, the roles and responsibilities of these are well defined and policies, procedures and regulations are in place to ensure the proper functioning of the University. The TLC is the highest body responsible for all matters related to teaching and learning such as revision of programmes. The Panel appreciates AU's well-defined governance and management structure.
- 5.2 AU has a dedicated centre, the Ahlia Center for Information and Documentation (ACID), which is responsible for the warehousing of information and documentation and its dissemination (website, Sharepoint). It is also in charge of the collection of university statistics. The Panel found during interviews with a range of staff that the faculty and managers have knowledge of the university policies and procedures and are involved in the implementation of the ones relevant to their duties. This confirms the findings of the survey on university-wide awareness and involvement of academic and administrative staff.
- 5.3 In terms of Quality Assurance, the Centre for Accreditation and Quality Assurance (CAQA) is responsible for the definition, monitoring, and implementation of the Ahlia University Quality Management Information System (AUQMS), a set of policies, processes, procedures and regulations for QA. Although much work has been done in terms of quality assurance at AU, the Panel found that in various instances 'the loop' was not closed hence the College does not obtain the full benefit from the quality assurance data collected from the various stakeholders, assessments/moderations. The Panel appreciates that there are arrangements for the management and assurance of quality at the University and the College of IT, and encourages the College to ensure that results are implemented.
- 5.4 The College of IT is led by the Dean who is helped by an Associate Dean and a Department Chair for each of the two departments (IT and Multimedia). A College Council and one Council for each department are the respective authorities for the follow up of the matters related to the programmes. The College interacts positively with the university directorates towards the implementation of the university strategic plan, policies and procedures. The departments and faculty members cooperate with this overall effort in the implementation and improvement of the

programme. During interviews with managers the Panel was told that in some cases, decisions that could have been taken at the Dean's level were forwarded unnecessarily to the Teaching and Learning Committee; likewise, decisions that could have been taken at the Teaching and Learning Committee's level were forwarded unnecessarily to the University Council. The Panel recommends that the College investigate ways to streamline the quality assurance process.

- 5.5 Overall, the Panel found good evidence that there are arrangements for the management and assurance of quality at the University and the College of IT. Various policies, procedures and regulations are in place and give reassurance about the university's commitment to improve continuously the quality of its programmes. The College of IT is working in line and cooperatively with the university Quality Assurance Management System. A Programme-within-College Review (PCR) Team has been set up and has been following the various aspects related to QA at the college level. According to these policies and procedures, the College collects feedback from the various stakeholders (students, employers, assessors, benchmarks). There is documented evidence that, based on the feedback collected from the various stakeholders; the College has prepared a 1- to 2-year action plan.
- 5.6 The IT faculty and the support staff have benefitted from the support of the University in terms of professional development on matters related to quality assurance. Training workshops are regularly given and various faculty members and support staff have participated in a number of them. There is documented evidence that the IT faculty and the support staff are aware of the university quality assurance drive and that they understand their duties in this regard. This understanding has been translated in terms of involvement in the college quality assurance system. The Panel appreciates that the teaching staff and support staff have shown understanding and involvement in the college quality assurance system.
- 5.7 A policy and procedure is in place for developing, reviewing, and closing down postgraduate programmes. The Panel is of the view that the policy and procedures are overall sound and well defined, however, it is not clear what triggers the development of new programmes or the frequency with which the need should be checked.
- 5.8 AU has a policy for internal and external assessments. External assessments of courses are performed and reports are collected from the External Assessors. External Examiners were also appointed to assess various courses taught in the BSIT, BSDSM, and MITCS programmes. A short period before the site visit, the external assessors submitted their reports. This, according to the CAQA staff the Panel met during the site visit, is meant to lead to an annual review of the programme at the college level, a review which can then lead to a proposed improvement plan that would need to go through the College Council, the TLC and the University Council.

- 5.9 Internal evaluation is performed for every course every semester through verification and moderation by a Department Moderation Committee. The findings from these review processes get forwarded from the Department to the College and from there, and upon approval, to the TLC, and then on to the University Council. An IT & Engineering Advisory Board whose members have substantial experience was set up a year ago with the aim of providing feedback about the programme from a market/industry perspective. The Advisory Board has formulated various improvement suggestions and, as a result, this has already led to inclusion of new courses that are more relevant to the market.
- 5.10 AU requires that the programmes be reviewed over a three-year cycle. The responsibility to follow up falls upon the TLC. The University has guidelines for the external evaluation of its academic programmes. Some templates are prepared to guide the evaluator on the aspects to be included in the report. An External Examiner/Assessor was appointed to review the BSDSM programme and has submitted his report. The Panel encourages AU to implement recommended changes. A list of departmental, college, and university committees that contribute to the management, evaluation, and improvement of the quality of the undergraduates programmes in the College of IT was made available to the Panel during the site visit. The Panel appreciates the implemented process of internal and external reviews of its programmes.
- 5.11 The Panel was informed during interviews with managers that the University has contacted consultants who are specialized in Higher Education to do a gap analysis. They have a scope of work that spans over two years and started three months prior to the site visit. Feedback has not yet been given.
- 5.12 The Ahlia Training and Development Center (ATDC) is a dedicated centre for the professional development of Ahlia University's teaching and non-teaching staff. The latter has designed a fairly extensive staff professional development programme as shown through the Annual Professional Development Plan, usually a two-year plan. The Panel found evidence that various College of IT teaching staff as well as other support staff (such as library and IT staff) have attended a number of workshops related to their duties, e.g. on the design of programme and course ILOs, the use of Moodle, teaching and learning methodologies, and assessment methodologies. Each workshop was re-run to give a chance to faculty and staff to benefit from the training. Staff surveys have also been collected after these training programmes to assess their quality and to seek the staff's professional development needs. The Panel found from interviews with teaching staff that they have benefitted from these efforts.
- 5.13 Ahlia University and the College of IT have conducted surveys to the College of IT and Engineering Advisory Board and programme alumni to find out about the strengths and weaknesses of the programme as they relate to the market. The

advisory board, which consists of a number of highly experienced and motivated members, has already suggested valuable improvements to the programme so as to make it more relevant to the market. However, the alumni survey, prepared by the AU Centre for Measurement and Evaluation, is a general survey which seems to be the same for all colleges. For the BSDSM programme, the survey has been filled out by only 11 alumni and the Centre for Measurement and Evaluation reported that a number of questions had not been answered by the participating alumni. In addition, the Panel was informed during the site visit that representatives from the College of IT are going to start an extensive effort to meet with presidents of IT societies and companies in a drive to strengthen the links with the industry and the market.

5.14 In coming to its conclusion regarding the Effectiveness of Quality Management and Assurance, the Panel notes, *with appreciation*, the following:

- There is a well-defined governance and management structure.
- There are arrangements for the management and assurance of quality at the University and the College of IT.
- The College of IT is positively interacting with the university-wide efforts on quality assurance.
- The teaching staff and support staff have shown understanding and involvement in the College quality assurance system.
- The College has implemented a process of internal and external reviews of its programmes and courses.

5.15 In terms of improvement, the Panel **recommends** that:

- investigate ways to streamline the quality assurance process.
- implement changes required from external assessor reports as well as from analysis of feedback.

5.16 **Judgement**

On balance, the 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 Panel draws the following conclusion in accordance with the DHR/QQA *Programmes-within-College Reviews Handbook, 2012*:

There is confidence in the Bachelor in Distributed Systems and Multimedia of the College of Information Technology offered by Ahlia University.