COLLEGE OF ENGINEERING (COE)
Bachelor of Science in Informatics Engineering (BSIE)

Batch 2010 Alumni Survey
SY 2013-2014

Introduction

AMA International University-Bahrain (AMAIUB) periodically conducts tracer studies on its alumni. This is purposely to monitor the link of the program with the employment of its graduates, to better improve its curricular offerings, systems and procedures to enable the graduates to be competitive and responsive to the needs of the labor environment. Hence, this report summarizes the results of the tracer study to graduates of the BSIE program.

Objectives

This alumni tracer report generally aims to determine the alumni-respondents personal employment profile of the graduates of the BSIE program and the attainment of the Program Educational Objectives (PEOs). Specifically, to identify the employment destination/status/information/sector and the nature of industry the alumni-respondents are involved in.

Methodology

A survey was conducted in June 2014 among the graduates of the Bachelor of Science in Informatics Engineering (BSIE) using the Alumni Survey Questionnaire. Alumni of batch 2010 were the respondents of the survey specifically on the assessment of the PEOs based on the given indicators.

A total of 23 alumni of batch 2010, the actual number of alumni-respondents totaled 12 or 52.2% of the expected respondents of 23.

The alumni themselves were contacted through phone interviews conducted by the AMAIUB Alumni Office using the Alumni Database. The survey forms were sent and/or retrieved from the alumni-respondents through e-mail, phone interviews, or their personal visits in the university. Gathered data were tabulated, analyzed and interpreted.

The evaluation of the PEOs was rated by the alumni-respondents using the five-point Likert scale as shown below:

5- Strongly Agree
4- Agree
3- Agree to some extent

2- Disagree

1- Strongly Disagree

The mean ratings were interpreted and described based on their level of agreement and disagreement on the given indicators as follows:

4.51- 5.00	Strongly Agree
3.51- 4.50	Agree
2.51- 3.50	Agree to some extent
1.51- 2.50	Disagree
1.00- 1.50	Strongly Disagree

Hence, mean ratings of 3.51 to 5.00 means that the PEOs were **Attain**. The AMAIUB graduates of the BSBI program were able to practice successful management in business and industry (PEO 1) and foster professionalism grounded on the highest ethical standards (PEO 2).

Executive Summary

This Alumni Survey conducted in June aims to determine the alumni-respondent's evaluation of AMAIUB's Program Educational Objectives (PEOs) of the Bachelor of Engineering Informatics (BSIE). Results of this survey will serve as a basis for improving the quality of teaching and learning and in identifying the key result areas for improvement. This then will ensure that the curriculum is in harmony with the needs of the various manpower resources.

Table 1
Summary of BSBI Alumni-Respondents
(2010)

Batch	Number of Graduates			Percentage (%) of Respondents
	Actual	Expected Number of Respondents	Actual Number of Respondents	
2010	23	23	12	52.7%

Employment Profile of AMAIUB BSIE Alumni

Table 2 presents the results of the alumni-respondents destination. Sixty nine (7) or 58% proceeded to appropriate employment; 5 or 42% proceeded to other employment.

Table 2
Results of Alumni-Respondents Destination

Destination of Graduates	Frequency	Percentage (%)
Proceeded to appropriate employment	7	58%
Proceeded to other employment	5	42%
Undertaken post graduate studies	0	0%
Engaged in other types of activities	0	0%
Total	**12**	**100%**

All of the alumni-respondents are employed (100%) (Table 3) in the private sector (83.33%) while (16.66%) in the government as depicted in Figure 1.

Table 3
Summary of Graduate-Respondents Employment Status

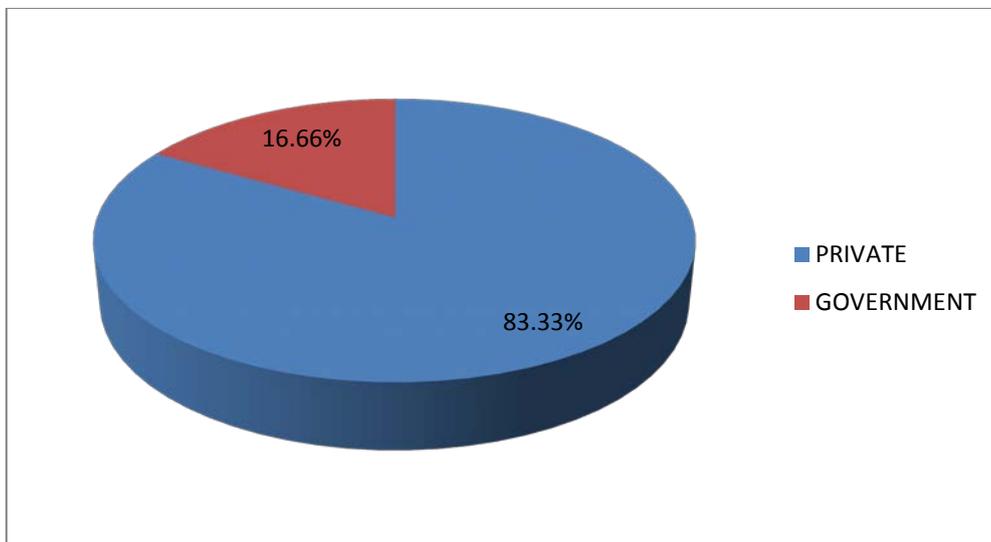| Employment Status	Frequency	Percentage (%)
Employed	12	100%
Unemployed	0	0
Total	**12**	**100%**

Figure 1
Alumni-Respondents Employment Sector Distribution

Table 4
Categories of Alumni-Respondents Employment

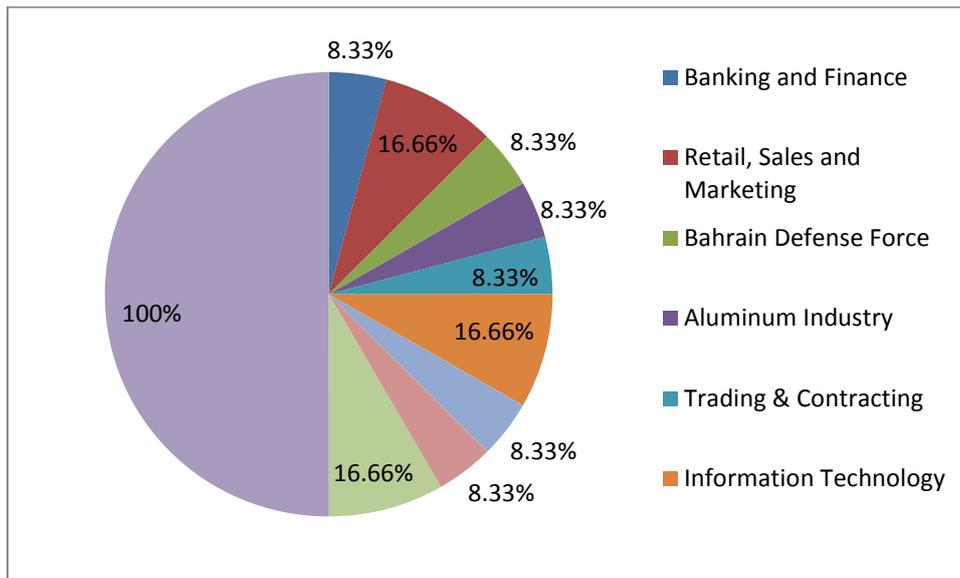| Nature of Industry	Frequency	Percentage (%)
Banking and Finance	1	8.33%
Retail, Sales and Marketing	2	16.66%
Bahrain Defense Force	1	8.33%
Aluminum Industry	1	8.33%
Trading & Contracting	1	8.33%
Information Technology	2	16.66%
Telecommunications	1	8.33%
Petroleum	1	8.33%
Graphics & Design	2	16.66%
Total	**12**	**100%**

*0 Unemployed

Figure 2
Categories of Alumni-Respondents Employment

Results of the employment profile imply that the graduates of the BSIE program are prepared to be in their chosen field or in any other available employment to practice their respective profession. Hence, the university was able to prepare them in their professional career equipped with the knowledge, skills, and training.

Assessment of BSIE Program Educational Objectives (PEOs)

The program educational objectives are broad statements that describe the attainment of the expectations from the graduates of a specific program after graduation. The BSIE alumni were able to evaluate the following PEOs:

PEO1. To enable our graduates to practice successful informatics engineers for the advancement of society.
PEO2.   To promote professionalism in engineering informatics engineering practice.

Table 5
Results ofPEOs Evaluation by the BSIE
Alumni-Respondents

PEO1. To enable our graduates to practice successful informatics engineers for the advancement of society.	Mean N= 12	Interpretation
• undertaking engineering projects that show my ability to solve complex technical problems and to work in multidisciplinary teams on problems whose solutions respond to needs of the Kingdom of Bahrain and the GCC.	4.5	Agree
• demonstrating professional engineering success via promotions and/or positions of increasing responsibilities.	4.75	Agree
• demonstrating life-long learning via progress toward completion of an advanced degree, professional development, or industrial training courses.	4.25	Agree
• driving organizational improvement efforts by providing training, mentoring or subject matter expertise to others.	4.25	Agree
Weighted Mean	**4.44**	**Agree**
PEO2. To promote professionalism in engineering informatics engineering practice.	Mean N= 12	Interpretation
• undertaking projects that take into consideration safety, health, environmental concerns and the public welfare, through adherence to required codes and laws.	4.25	Agree
• upholding ethical standards and contributing to the broader engineering community.	4.50	Agree
• setting and applying professional standards to achieve excellence in the workplace.	4.50	Agree
• demonstrating management and leadership skills, including negotiating with and influencing others, and leading a project team.	4.25	Agree
Weighted Mean	**4.37**	**Agree**

The results of PEO1 evaluation by the BSIE alumni-respondents as presented in Table 5 shows a weighted mean of 4.44 which means that the graduates of the program **Agree** that they were able to practice successful informatics/mechatronics engineers for the advancement of society, hencePEO1 was **attained.**

The results of PEO2 evaluation by the BSIE alumni-respondents as presented in Table 5 shows a weighted mean of 4.37 which means that the graduates of the program **Agree** that they were able to promote professionalism in engineering informatics/ mechatronics engineering practice., hence PEO2 was **attained.**

Thus, AMAIUB will continuously develop and implement innovations in the pursuit of the university's tri-functions- instruction, research and community engagement in consultation with the stakeholders which support the attainment of the university's vision, mission, goals and objectives. The university also ensures the consistency of the BSIE program and all its programs with the Bahrain Vision 2030. Thus producing high-skilled BSIE graduates dedicated to lifelong learning and equipped with knowledge and skills to respond to the growing socio-economic needs of Bahrain and the GCC as well.

Table 6
Assessment on the alumni's experience at the College of Engineering (COE) and on the extent the alumni's education has contributed to his/her professional and personal development.

FACTORS	N= 12	Interpretation
*Overall, I am satisfied with my **ACADEMIC** experience at COE.*	4	Agree
*Overall, I am satisfied with my **ACADEMIC** experience at AMAIUB.*	3.5	Agree
*Overall, I am satisfied with my **SOCIAL** experience at COE*	4	Agree
*Overall, I am satisfied with my **SOCIAL** experience at AMAIUB.*	4	Agree
My education developed my ability to function and work effectively in teams.	4.25	Agree
My education promoted my understanding of professional, ethical, legal, security and social issues and responsibilities.	4	Agree
My education taught me the ability to communicate effectively with a wide range of audience.	3.75	Agree
My education developed my ability to analyze the local and global impact of engineering informatics/mechatronics engineering on individuals, the organization and society.	3.75	Agree

My education paved the way to recognize the need for and the ability to engage in lifelong learning.	3.75	Agree
*Overall, I am satisfied with the **programme** I completed.*	4.25	Agree
The sequencing of courses within the programme is well-balanced.	4	Agree
The scheduling of courses is appropriate and reasonable.	4	Agree
The elective courses offered are practical and adequate.	4.25	Agree
My education manifests application of knowledge of computing and mathematics appropriate to the discipline.	4.5	Agree
My education promoted my ability to analyze problems and identify and define the computing requirements appropriate to their solution.	3.75	Agree
My education developed my ability to design, implement, and evaluate engineering-based systems, processes, components or programs to meet desired needs of varying complexities.	4	Agree
My education enabled the use of current techniques, skills, and tools necessary for engineering informatics/ mechatronics engineering practice.	4.25	Agree
My education provided broad intellectual coverage of the fundamentals of algorithms, data structures, software, and desgin, concepts of programming languages and computer organization and architecture.	4.25	Agree
Overall, I am satisfied with the quality of instruction in the programme.	4	Agree
My professors stimulated me to think critically, creatively and constructively at all times.	4.5	Agree
COE has prepared me well for future	4	Agree
Weighted mean	4.03	Agree

Summary

- The majority of the graduates of Bachelor of Science in Engineering Informatics (BSIE) program proceeded to appropriate employment after graduation mostly in private administrative and management industries.

- The alumni-respondents **Agree** on the attainment of the PEOs based on the different indicators.

- The alumni-respondents **Agree** on the Assessment on the alumni's experience at the College of Engineering (COE).

- AMAIUB will continue to produce graduates of the program equipped with knowledge and skills for the growing needs of the Kingdom of Bahrain and the region.

Recommendations

AMAIUB should:

- Ensure that the BSIE programme is consistent with the Bahrain Vision 2030
- Emphasize its culture of quality education
  - Produce highly-skilled and competent BSIE graduates who are:
    - Dedicated to life-long learning
    - Responsive to the growing socio-economic needs of Bahrain and the region
- continuously develop and implement innovations in the university's tri-functions on instruction, research, and community engagement, through:
  - consistent consultations and collaborations with the stakeholders
  - alumni
  - parents
  - industry partners or employers