



AMA International University BAHRAIN

COLLEGE OF ENGINEERING (COE)

Bachelor of Mechatronics Engineering (BSME)

Batch 2012-2013 &

Batch 2013-2014

Alumni Survey

Introduction

AMA International University-Bahrain (AMAIUB) periodically conducts tracer studies on its alumni. This is purposely to monitor the link of the programme with the employment of its graduates, improve its curricular offerings, systems and procedures, and 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 of the graduates of the BSME programme.

Objectives

This Alumni Tracer Report generally aimed to determine the alumni-respondents' personal employment profile and the attainment of the BSME's Programme Educational Objectives (PEOs). Specifically, it identified the employment destination/status/information/sector and the nature of industry the alumni are involved in.

Methodology

A survey was conducted in June 2016 among the graduates of the Bachelor of Science in Mechatronics Engineering (BSME) using the Alumni Survey Questionnaire. The Batch 2013-2014 alumni were the respondents of the survey specifically on the assessment of the PEOs based on the given indicators.

The respondents of the survey were as follows:

- a. A total of 48 alumni of Batch 2012-2013, in which the actual number of alumni-respondents totaled 16 or 33%.
- b. A total of 43 alumni of batch 2013-14, in which the actual number of alumni-respondents totaled 19 or 44%.

As shown in Table 1, it can be noticed that the number of respondents of Batch 2013-2014 is higher than Batch 2012-2013. This may be due to the increase of the awareness of alumni. This may be due to increase in the awareness of alumni. The University improved its connection and communication with its alumni through having annual alumni home coming events.

Generally, the total number of respondents is low. This may be due to a number of factors like some alumni are not reachable while some of them have changed their contact numbers (mobile) or e-mail and some have travelled out of Bahrain, among others.

The survey was conducted by the Head of the AMAIUB Alumni Office through 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 attained. The AMAIUB graduates of the BSME programme were able to Practice as successful Mechatronics Engineer for the advancement of society (PEO1)and promote professionalism in Mechatronics engineering practice (PEO2).

Executive Summary

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

Table 1
Summary of BSME Alumni-Respondents
2012-2014

Batch	Number of Graduates		
	Actual	Actual Number of Respondents	Percentage (%) of Respondents
2012-2013	48	16	33%
2013-2014	43	19	44%

Table 2
Nature of Industries

Nature of Industry	Frequency	Percentage (%)
Industries Sector	4	25%
Bahrain Defense Force	1	6%
Petroleum	4	25%
Health Sector	1	6%
Administrative and Management	6	38%
Telecommunication	1	6%
Information and Technology	1	6%
Others	1	6%
Total	19	100%

Figure 1 : Distribution of Alumni Job Field

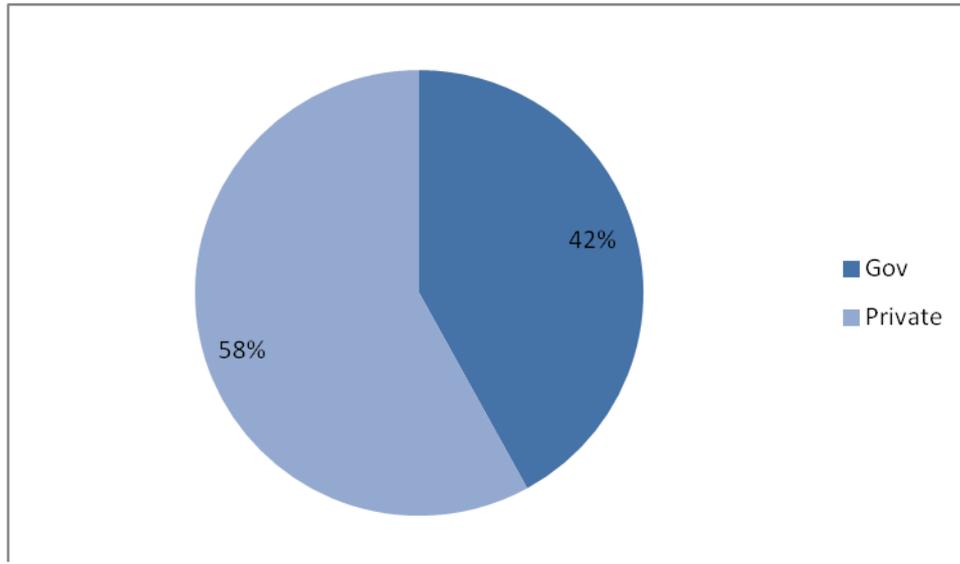


Table 2 and Figure 1 show the nature of the industries that the alumni Batch of 2013-14 of BSME programme are connected with. It can be concluded that most of BSME alumni are professionally practicing their skills, acquired from the University, in their jobs. Table 3 shows the companies they are connected with and the positions they assume.

Table 3

Alumni Employment Status

Kamel Mahdi Ali Omran	39216631	Moh / Security Dept
Mohamed Abdulla Sultan Abdulla Sultan Alsendi	36606682	Moi (Admin)
Mohamed Saeed Jasim Mohamed Ali Mahdi	36052710-39907277	Zain / Admin
Omar Ismaeel Abdulla Ismaeel Mohamed	39898607-39888667	Nhra - Engineer
Mohamed Ali Habib Ahmed Salman	33223371	Lmra / Inspector
Sadeq Jaafar Ali Hasan Mohamed Ali	36266647	Gpm Company / It
Bader Abdulelah Abdulrahim A.Jalil Alkooheji	66645554	Mofa / Admin Work
Khaled Ismaeel Shaker Almohamed	33050580	Babpco / Operator In Gas Distribution
Mohamed Aqeel Ahmed Saleh Mohamed Alshaikh	35353632	Bdf / Technician

Mohamed Emadeldin Ahmed Abdelalim	9.66551e+11	Ksa / Engineer In A Company
Marwan Mohamed Emsaeedi Abedrabbuh Alowd	33024311	Moi / Admin Work
Husain Ali Abdulla Abbas Marhoon	33939398	Ewa / Admin
Qasim Mohamed Hasan Abdulla Alhammam	33443434	Constriction / Own Business
Isa Abbas Isa Ali	33060623	Alnassar Sport Club - Own Business
Sayed Ali Jameel	9.66534e+11	Redha Fire Control Company / Design Eng.
Sayed Jaafar Alawi Jaafar Alawi	39121488	Bapco / Operation
Jaber Hasan Ahmed Ali Yusuf Alaradi	36955020	Bapco / Control
Muneer Kadhem Ahmed Ali Ahmed	39954055	Bapco / Control
Mohamad Jaffer Isa	9.66542e+11	Scb / Sales Agent

Assessment of BSME Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) are broad statements that describe the attainment of the expectations from the graduates of a specific programme after graduation. The BSME alumni were able to evaluate the following PEOs:

PEO1. To enable our graduates to practice successful Mechatronics engineers for the advancement of society.

PEO2. To promote professionalism in Mechatronics engineering practice.

Table 4 shows the results of PEOs evaluation by BSME alumni respondents. The AMAIUB graduates of the BSME programme agreed that the PEOs were attained: PEO 1 which states that our graduates practice to be successful informatics engineers for the advancement of society with mean rating of 4.18 and PEO 2 which is to promote professionalism in engineering informatics/engineering practice with mean rating of 4.22. The mean ratings within of 3.51 to 5.00 means that the PEOs are attained. Hence, with these results, it can concluded that the PEOs were attained.

Table 4
Results of PEOs Evaluation by the BSME
Alumni-Respondents

PEO1. To enable our graduates to practice successful Mechatronics Engineers for the advancement of society.	Mean N= 19	Interpretation
<ul style="list-style-type: none"> 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	Agree
<ul style="list-style-type: none"> demonstrating professional engineering success via promotions and/or positions of increasing responsibilities. 	4.21	Agree
<ul style="list-style-type: none"> demonstrating life-long learning via progress toward completion of an advanced degree, professional development, or industrial training courses. 	4.36	Agree
<ul style="list-style-type: none"> driving organizational improvement efforts by providing training, mentoring or subject matter expertise to others. 	4.15	Agree
Weighted Mean	4.18	Agree
PEO2. To promote professionalism in Mechatronics Engineering practice.	Mean N= 19	Interpretation
<ul style="list-style-type: none"> undertaking projects that take into consideration safety, health, environmental concerns and the public welfare, through adherence to required codes and laws. 	4.31	Agree
<ul style="list-style-type: none"> upholding ethical standards and contributing to the broader engineering community. 	4.15	Agree
<ul style="list-style-type: none"> setting and applying professional standards to achieve excellence in the workplace. 	4.26	Agree
<ul style="list-style-type: none"> demonstrating management and leadership skills, including negotiating with and influencing others, and leading a project team. 	4.15	Agree
Weighted Mean	4.22	Agree

The results of PEO1 evaluation by the BSME alumni-respondents as presented in Table 4 shows a weighted mean of 4.18, which means that the graduates of the programme agree that they were able to practice successful Mechatronics engineers for the advancement of society. Hence, PEO1 was attained.

The results of PEO2 evaluation by the BSME alumni-respondents as presented in Table 4 shows a weighted mean of 4.22, which means that the graduates of the programme agree that they were able to promote professionalism in Mechatronics engineering practice. Hence, PEO2 was attained.

Thus, AMAIUB will continuously develop and implement innovations in the pursuit of the University’s tri-functions, which are instruction, research and community engagement, in consultation with the stakeholders which support the attainment of the University’s vision, mission, goals and objectives. AMAIUB also ensures the consistency of the BSME programme and all its programmes with the Bahrain Vision 2030. Thus, the University produces high-skilled BSME 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 5
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= 19	Interpretation
Overall, I am satisfied with my <u>ACADEMIC</u> experience at COE.	4.15	Agree
Overall, I am satisfied with my <u>ACADEMIC</u> experience at AMAIUB.	4.26	Agree
Overall, I am satisfied with my <u>SOCIAL</u> experience at COE	4.15	Agree

Overall, I am satisfied with my <u>SOCIAL</u> experience at AMAIUB.	4.05	Agree
My education developed my ability to function and work effectively in teams.	4.23	Agree
My education promoted my understanding of professional, ethical, legal, security and social issues and responsibilities.	4.05	Agree
My education taught me the ability to communicate effectively with a wide range of audience.	4.05	Agree
My education developed my ability to analyze the local and global impact of engineering informatics/mechatronics engineering on individuals, the organization and society.	4	Agree
My education paved the way to recognize the need for and the ability to engage in lifelong learning.	3.94	Agree
Overall, I am satisfied with the <u>programme</u> I completed.	4	Agree
The sequencing of courses within the programme is well-balanced.	4.05	Agree
The scheduling of courses is appropriate and reasonable.	3.89	Agree
The elective courses offered are practical and adequate.	4.15	Agree
My education manifests application of knowledge of computing and mathematics appropriate to the discipline.	4.31	Agree
My education promoted my ability to analyze problems and identify and define the computing requirements appropriate to their solution.	4.21	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.	4.31	Agree
My education enabled the use of current techniques, skills, and tools necessary for engineering informatics/mechatronics engineering practice.	4.103	Agree
My education provided broad intellectual coverage of the fundamentals of algorithms, data structures, software, and design, concepts of programming languages and computer organization and architecture.	4.15	Agree
Overall, I am satisfied with the quality of instruction in the programme.	4.21	Agree

My professors stimulated me to think critically, creatively and constructively at all times.	4.15	Agree
COE has prepared me well for future	4	Agree
Weighted mean	4.11	Agree

Summary

- The majority of the graduates of Bachelor of Science in Mechatronics Engineering (BSME) programme 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.
- AMAIUB will continue to produce graduates of the programme equipped with knowledge and skills for the growing needs of the Kingdom of Bahrain and the region.

Recommendations

AMAIUB should do the following:

1. ensure that the BSME programme is consistent with the Bahrain Vision 2030
2. emphasize its culture of quality education produce highly-skilled and competent BSME graduates who are:
 - a. dedicated to life-long learning

- b. responsive to the growing socio-economic needs of Bahrain and the region
- 3. continuously develop and implement innovations in the university's tri-functions on instruction, research, and community engagement, through:
 - a. consistent consultations and collaborations with the stakeholders
 - b. alumni
 - c. parents
 - d. industry partners or employers