The Environmental Health (EH) Department at the American University of Beirut is hosted within the Faculty of Health Sciences, and offers several bachelor’s and master’s degrees, in addition to a PhD degree. The EH Department offers an undergraduate program in Environmental Health and awards a Bachelor of Science (BS) in Environmental Health. It also offers an undergraduate minor in Environmental Health. Moreover, as part of the Interfaculty Graduate Environmental Science Program (IGESP), the department awards a Master of Science (MS) degree in Environmental Science.

The undergraduate program in Environmental Health, which was established in 1961, extends over three years and one summer following the completion of a freshman year at university or its equivalent. The program prepares professionals in the various disciplines of the major through rigorous theoretical and practical training. It aims at graduating professionals able to (1) apply contemporary knowledge and technical skills to analyze, prevent and remediate environmental problems, (2) plan, administer and implement community-based environmental health programs, (3) disseminate knowledge to promote public and environmental health awareness and (4) exhibit high principles of character, a sense of civic and moral responsibility, and a commitment to basic values of human life and ecological well-being.

Throughout the three years of study, students take courses that provide them with fundamental knowledge of environmental health with emphasis on evaluation, prevention and control of major environmental problems at the local, regional and global levels. These courses expose students to the areas of (1) water and wastewater quality and control, (2) solid waste management, (3) indoor and outdoor air pollution, (4) occupational health and safety, (5) toxicology and risk assessment, (6) food safety, (7) environmental microbiology, (8) environmental economics, (9) environmental ethics, and (10) environmental management. In addition to the above mentioned major courses, the core program includes courses in general education (natural sciences, social sciences, humanities, quantitative thought, languages), public health and a variety of free electives, which all of the selected universities. Detailed information about universities, degree titles, colleges and departments that offer environmental programs can be found in Appendix Table (p96).

The survey revealed that most Arab countries offer undergraduate and postgraduate environmental programs in their universities. Collectively, the 57 universities surveyed offer 221 degree programs on environmental topics, consisting of 71 bachelor's degrees, 102 master's degrees, 36 PhDs and 12 technical diplomas. Most Arab countries offer a minimum of one program directly related to environment (Figure 3). Table 2 shows detailed information about universities, degree titles, colleges and departments and website links in all Arab countries.

In order to determine the distribution of the academic programs throughout the region, results were grouped into the five Arab sub-regions (Levant, GCC and Yemen, North Africa and African Horn). The highest number of environment-related programs (55) are found in the Levant (Iraq, Jordan, Lebanon, Palestine, Syria), followed by 42 programs in the GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE) and Yemen, 39 programs in North Africa (Algeria, Libya, Mauritania, Morocco, Tunisia), 26 programs in the Nile Valley (Egypt, Sudan), and 3 programs in the African Horn (Comoros, Djibouti, Somalia) (Figure 4).

Academic programs related to the environment, which are offered by Arab universities, are distributed among various disciplines ranging from Environmental Engineering and Water Resources Management to more policy-related disciplines such as Environmental Education, Environmental Law, and Environmental Policy (Figure 5).
The program also provides students with insights and skills into the application of environmental health principles to real-world problems through the practicum/internship course. In the summer of their junior years, students register for the practicum/internship course, which provides them with the opportunity to supplement their theoretical and laboratory experience with practical field experience. During the internship, students assist in ongoing tasks at the site, under close supervision and guidance of field supervisors in pre-approved environment-related work settings. This experience sharpens students’ writing, technical and analytical skills and develops their ability to successfully complete well-defined tasks within a limited time frame.

Students interested in pursuing a medical degree can choose to join the environmental health pre-medical track. This track allows students to sit for the Medical College Admissions Test (MCAT) and apply to the medical school at AUB or elsewhere. As such, throughout their three years of study at the EH department, students following this track register for the pre-medical courses in parallel with other major courses.

At the environmental health department, the diverse student body enriches the class discussions and students’ experiences. Students are well rounded as they have the opportunity to study and work closely with a committed faculty that is actively engaged in research covering a wide scope of environmental hot topics to advance knowledge in their disciplines. Moreover, students are continuously advised in their choice of courses and are closely followed up in terms of academic performances and progress.

On average 20 students graduate from the program per year, many of whom occupy key positions in several local and international organizations. These experts work in assessing, managing, controlling and preventing environmental risks through research, field work, advocacy and interventions. After the completion of the undergraduate environmental health program requirements, students can either pursue graduate studies in environmental science, public health or any other field, or they can join the workforce.

For an environmental health graduate, the job market is wide, diversified and non-crowded. With a degree in environmental health, graduates can have satisfying and rewarding careers in the (1) private sector (e.g., industries, hospitals & health centers, construction firms, water companies), (2) public/governmental sector (e.g., ministries, water authorities, petroleum administrations), (3) United Nations Agencies (e.g., UNDP, UNICEF, UNRWA, UNFPA, WHO, ILO), (4) international & national non-governmental organizations (5) research institutes and research centers.

As indicated, there is a higher prevalence of scientific and technical degrees over economics, education and policy-related ones. The highest frequency is in Environmental Sciences (34 degrees), followed by Environmental Engineering (30 degrees), Water Resources (29 degrees), and Renewable Energies (19 degrees).

In the Nile Valley region, there is a lack of academic programs concerning Green Economy, as well as of Environmental Education. Environmental Policy degrees are also quite rare in Arab universities, with only two programs registered in the survey. It is also found that the number of postgraduate programs is higher than undergraduate ones. Master’s degrees are the most frequently offered programs, followed by bachelor’s, PhD, and diploma programs, respectively (Figure 6).

Undergraduate programs related to the environment, particularly bachelor’s degrees, are available in most Arab countries. The quantity of these programs depends on the need of the national market in each country. In terms of the specializations of Bachelor’s degrees, there is a general shift from classic Environmental Science that focuses on physics, chemistry, biology, and math to a multidisciplinary approach that integrates engineering and health sciences. Figure 7 shows the major disciplines of bachelor’s programs offered by Arab universities. Only 23 percent of the courses are under general environmental sciences. Other courses are titled with more specialized majors such as Environmental Engineering, Water, Energy, Agriculture and Geology.

19 percent of the bachelor’s program disciplines are grouped under “others” and are related to environmental economics, environmental education and media, environmental health,