Can Accreditation Stimulate Change?

By Zeinab Amin, Professor & Director of the Actuarial Science Program, Department of Mathematics and Actuarial Science, Associate Dean for Undergraduate Studies, School of Sciences and Engineering

In summer 2018, AUC's Bachelor of Science Program in Actuarial Science received ABET accreditation for the duration of six years until 2024. ABET (http://www.abet.org/) is a nonprofit, non-governmental accrediting agency for programs in applied and natural science, computing, engineering and engineering technology. This accomplishment serves as official recognition that the program meets the rigorous standards and criteria for accreditation established by ABET: program educational objectives, student outcomes, continuous improvement, curriculum, faculty, facilities and institutional support.

The preparation of the self-study report for the accreditation process was a very good opportunity for the department to assess the strengths and limitations of the program submitted for review. This reflective process provided very valuable information, which helped in developing a plan that enabled the department to maintain their strengths and overcome their limitations.

Embarking on the accreditation process was a challenging yet very rewarding task. Through accreditation, we ensure that the program’s educational objectives are consistent with the institutional mission. We learn to think of all program constituencies and ensure the program educational objectives meet their needs. We solicit student input through course assessment surveys, focus groups and exit surveys. We solicit alumni input through surveys that assess the effectiveness of the program. We seek strategic advice on the future direction of the industry in Egypt and the Middle East from the advisory board of the department as well as employers through the employers’ satisfaction survey to ensure students receive an education that is responsive to community needs. We ensure this feedback is systematically used as input in the continuous improvement of the program.

As part of the assessment process of the Actuarial Science Program, the department conducted focus groups in collaboration with CLT to get feedback from senior and graduating senior students on the effectiveness of the program, through assessing its student outcomes. In addition to exploring students’ perceptions on how much they believe the program has helped them achieve the intended learning outcomes, students were asked to identify the most positive aspects of their learning experience in the program as well as areas that need further development. The skillfulness of CLT staff in moderating the focus groups and the interaction they used to motivate students to actively participate resulted in very valuable conclusions that helped us identify the points of strength and weakness in the program. CLT's report was discussed at the department meeting and a plan was set to translate the report into strategy and action plans.

One of the main areas students identified as needing further development was "Career Preparation". Students, who highlighted the program’s emphasis on theory, pointed out the need for more real-world subject matter. Another important and related finding, also shared by other stakeholders (alumni, employers and members of the advisory board), was the need to incorporate financial modelling skills in the actuarial science curriculum. To act on these recommendations, the department decided to introduce a financial modelling course. The objective of the course is to provide students with a practical perspective on how to build financial models using business cases, an important step that broadens the scope of the program and the career options for graduates and prepares students for a possible investment banking career.

The course, which was introduced for the first time in fall 2017, was designed and taught by an expert in investment banking and corporate finance who created a vibrant student experience. A mid-semester assessment of the course conducted by CLT showed very favorable student feedback. There was unanimous agreement
among students that the course had adequately developed their financial modeling skills and prepared them for future careers in the financial industry.

The accreditation process was an effective reflection process that allowed us to learn from experiences and enabled us to create effective assessment measures, set reasonable target levels and analyze data efficiently to produce results and strategies for improvement. CLT’s role was indispensable throughout the process.