



**the American university in Cairo**

School of Sciences and Engineering  
Department of Computer Science and Engineering  
Office of the Chairman

## **The Distinction between CSCI and CSCE Programs and Outcomes**

Both the Computer Science and Computer Engineering programs at AUC are considered state of the art of their kind; they prepare graduates for a good blend of what the local and international computing job market needs. Although both programs have major intersections spanning primary areas of computing, the difference between the Computer Science major and the Computer Engineering major is similar to the difference between any Science and Engineering degree. A graduate with a Computer Science degree is expected to conduct theoretical work as well as software development, while a graduate with a Computer Engineering degree should be able to design and implement systems that involve the integration of software and hardware systems. Accordingly, Computer Science focuses more on the ability to innovate new computing solutions, new algorithms for solving problems, new programming languages, new software engineering methodologies, and new underlying theories of the domain, with a good flavor of application development. Computer Engineering on the other hand, like any other engineering degree, focuses more on the ability to innovative economic solutions to ongoing computing problems, with a good flavor of computer architectures, embedded systems, distributed systems, computer networking, and hardware interfacing. Both the Computer Science and the Computer Engineering curricula at AUC are compliant with the reputed IEEE/ACM Computing Curricula Guidelines and Standards.