



www.aucegypt.edu

Department of Computer Science and Engineering  
AUC New Cairo  
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CSCE@aucegypt.edu

## Full-Time Computer Science and Engineering Faculty

- SHERIF ALY**, Professor and Chair (2005); tenure  
D.Sc. 2001, George Washington University, USA  
Mobile and Pervasive Systems, Software Engineering and Programming Languages
- MOHAMED SHALAN**, Associate Professor and Associate Chair (2010); tenure  
PhD 2003, Georgia Institute of Technology, USA  
Embedded Real-Time Systems, Digital Systems Design, Computer Architecture and Electronic Design Automation
- TAMER ELBATT**, Associate Professor and Graduate Program Director (2017)  
PhD 2000, University of Maryland College Park, USA  
Performance analysis, modeling and optimization of wireless networks and mobile computing systems, with emphasis on 5G Networks and the Internet of Things (IoT)
- AHMED RAFEA**, Professor (1999); tenure  
PhD 1980, University Paul Sabatier, France  
Knowledge-Based Systems, Natural Language Processing, Machine Translation and Data and Text and Web Mining
- AMR EL-KADI**, Professor (1993); tenure  
DSc 1993, The George Washington University, USA  
Operating Systems, Distributed Systems, Software Engineering, Computer Networks and Computer Architecture
- AMR GONEID**, Professor (1990); tenure  
PhD 1969, Ain Shams University, Egypt  
Image Processing, Computer Vision and Theoretical Computer Science
- AWAD KHALIL**, Professor (1998)  
PhD 1981, Rennes-I University, France  
Database Systems, Knowledge Discovery and Data Security
- CHERIF SALAMA**, Assistant Professor (2018)  
PhD 2010, Rice University, USA  
Programming Languages, Computer Architecture, GPU Computing and Artificial Intelligence
- HOSSAM SHARARA**, Assistant Professor (2018)  
PhD 2012, University of Maryland, USA  
Machine Learning, Data Mining, Social Network Analysis and Multi-Modal Relational Learning
- KARIM SOBH**, Assistant Professor (2018)  
PhD 2016, The American University in Cairo, Egypt  
Operating Systems, Distributed Systems, Cloud Computing and Software Engineering
- MIKHAIL MIKHAIL**, Professor (1982); tenure  
PhD 1977, Carleton University, Canada  
Computer Networks, Computer Graphics and Software Systems
- MOHAMED MOUSTAFA**, Associate Professor (2011); tenure  
PhD 2001, City University of New York, USA  
Human Face and Iris Identification, Computer Vision, Pattern Recognition, Image and Video Processing, Image Understanding, Neural Networks and Genetic Algorithms
- NOURHAN SAKR**, Assistant Professor (2019)  
PhD 2019, Columbia University, USA  
Combinatorial Optimization, Scheduling, Algorithms, Data Science and Social Impact
- SHERIF EL-KASSAS**, Professor (2002); tenure  
PhD 1994, Eindhoven University of Technology, The Netherlands  
Formal Methods in Software Engineering and Computer Security

## Why Join AUC's Graduate Computer Science Program?

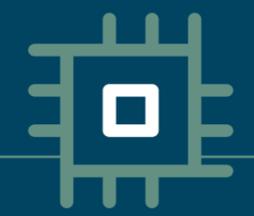
- AUC provides a quality professional education that advances the ideals of American liberal arts and lifelong learning. As freedom of academic expression is fundamental to this effort, AUC encourages the free exchange of ideas and promotes open and ongoing interaction with scholarly institutions throughout Egypt and other parts of the world.
- The University environment is designed to advance proficient use of the tools of learning as well as students' thinking capabilities, language and personal skills.
- Students are trained by outstanding faculty members with PhD degrees from leading universities in the United States, Canada, Europe and Egypt.
- AUC has one of the best English-language libraries in the Middle East, equipped with state-of-the-art information access technologies.
- The campus includes up-to-date computer facilities and software, as well as well-equipped experimental laboratories in nearly every specialty.
- Students have access to a rich and diverse student life with a broad array of extracurricular activities.
- A new campus in New Cairo that is spacious, technologically advanced and environmentally sensitive offers world-class educational resources.

Program Catalog:  
[http://catalog.aucegypt.edu/preview\\_program.php](http://catalog.aucegypt.edu/preview_program.php)

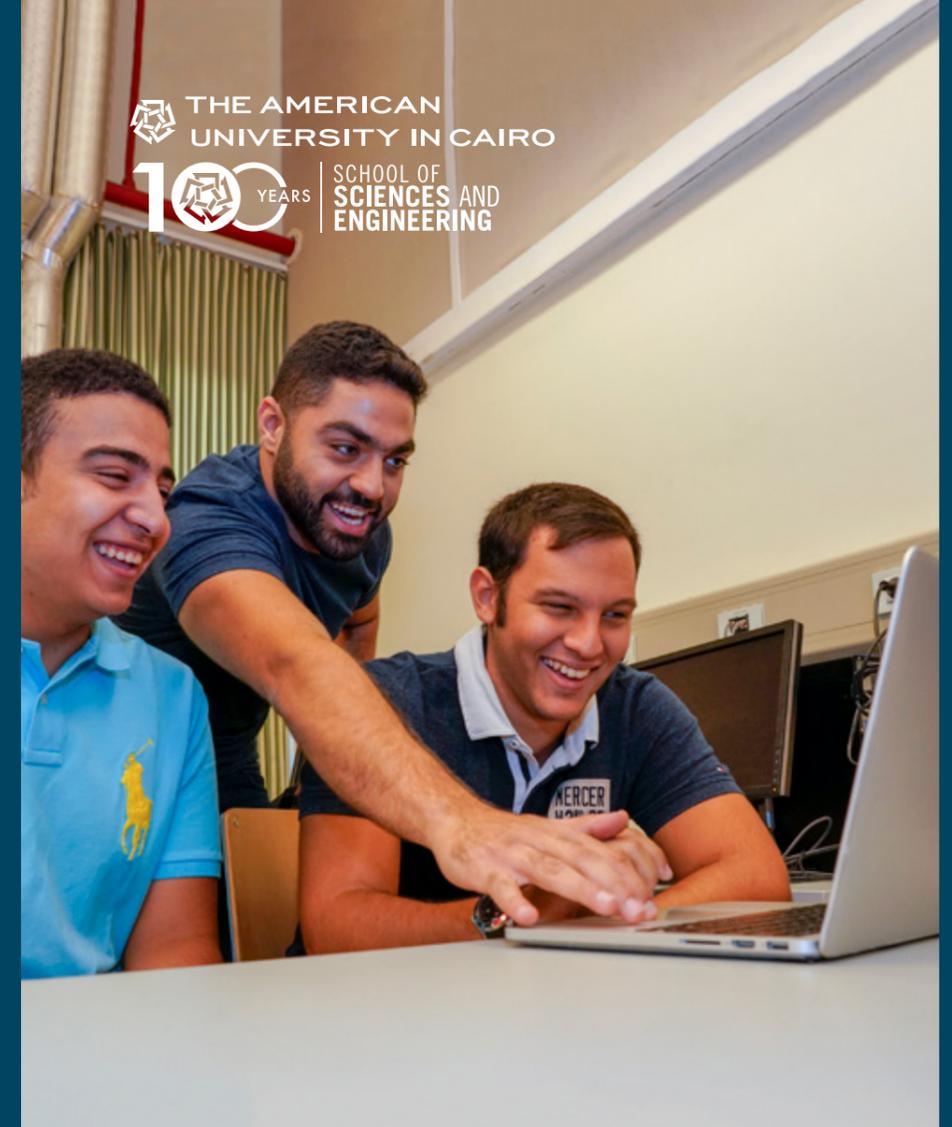


## The Computer Science and Engineering Faculty

The computer science and engineering faculty members are current and active in the discipline and have the necessary technical breadth and depth to support a modern computer engineering program. There are enough faculty members to provide continuity and stability, cover the curriculum reasonably and to allow an appropriate mix of teaching and scholarly activity (100% of our full-time faculty have published peer-reviewed papers in reputable international scientific journals, conference proceedings and chapters in book over the past five years). The department has 14 full-time faculty members, eight of whom are tenured.



## Undergraduate Computer Engineering Program





The undergraduate program in computer engineering aims to produce graduates with a broad perspective in both software and hardware topics relevant to computer systems engineering. It provides the foundation and areas of specialization necessary to analyze, design and evaluate systems software, middleware and software/hardware architectures and interfaces. This is achieved through enabling students to integrate various analysis and design methodologies, models, techniques and tools to develop software/hardware systems and their interfaces at the edge of technology; train students to communicate effectively, think critically and recognize and consider the impact of computing solutions in a global and societal context with an ability to understand and be sensitive to other cultures; motivate students to engage in life-long learning, develop their ability to pursue graduate studies in computer science, computer engineering or other related areas; and develop students who are creative, possess qualities of leadership and are committed to professional and ethical conduct.



### Mission

The mission of the Department of Computer Science and Engineering at AUC is to:

- Motivate and inspire students by providing high-caliber, fully integrated computing programs
- Provide leadership and innovation in a rapidly evolving global information society
- Advance the state of knowledge in computing
- Pursue scholarly research for publication and dissemination, through a comprehensive learning environment

### Vision

The Department of Computer Science and Engineering at AUC aspires to be an internationally recognized source of knowledge that produces outstanding graduates in computer science and computer engineering.

### Program Educational Objectives

The computer engineering program at AUC graduates a computer engineer who, within a few years of graduation, fulfills societal needs, with consideration to ethical and environmental issues in one or more of the following roles:

- A professional team member in a multidisciplinary environment, local or global
- A distinguished member of the computer engineering field
- A successful member of an advanced academic or research organization
- A successful entrepreneur

### Admission Requirements

Students are admitted to the computer engineering program either upon admission to AUC or after successful completion of criteria courses. High-school students with a mathematics and science background are accepted upon admission to AUC based on their high-school grades and the availability in the computer engineering program. Undeclared and transfer students are admitted to the program upon completing criteria courses at AUC. Students are accepted based on their MGPA and OGPA and on the availability in the computer engineering program.

### Graduation Requirements

A total of 162 credits is required for the Bachelor of Science degree in computer engineering:

Core Curriculum Requirements	33 credits
Engineering Core Requirements	48 credits
Concentration Requirements	63 credits
Concentration Electives	15 credits
General Electives	3 credits

### Facilities and Specialized Laboratories

The computer engineering curriculum is served by the specialized, up-to-date computer engineering laboratories and the well-equipped laboratories of the science and engineering departments. The AUC Library collection fully supports the computer engineering program, with materials ranging from recently published textbooks and references to current issues of relevant journals. The library has enormous electronic resources that students can access on or off campus.



### Extracurricular Activities

Students are encouraged to participate in activities outside the classroom. There are so many activities to choose from, including ACM and IEEE Student Chapters, the Computer Science and Engineering Association (CSEA) and the Computer Club and numerous other student-run organizations catering to a wide variety of interests. Many students participate in international competitions such as the ACM's programming and Microsoft's Imagine Cup contests. AUC students have performed exceptionally well in these competitions at the international level.

### Prospective Jobs

The computer engineering program at AUC is designed according to the highest international standards to prepare students for a variety of careers. Our graduates are well-prepared to occupy professional positions, including computer architects, network engineers, software engineers, systems specialists and applications developers. The program also prepares students for further studies and research in the computing field.

### Research

The faculty and students in the department are engaged in research in a wide variety of topics. Please refer to the department's website, or email the department for details.

### Accreditation

- AUC is accredited by the Middle States Commission on Higher Education (MSCHE) in the United States
- The Bachelor of Science in computer engineering program is accredited by the Supreme Council of Universities in Egypt
- The computer engineering program is accredited by the Accreditation Board of Engineering and Technology (ABET).

The ABET website is [www.abet.org](http://www.abet.org)