

AMERICAN UNIVERSITY OF ARMENIA



COLLEGE OF ENGINEERING

PROGRAM OF
COMPUTER AND INFORMATION
SCIENCE

Information Brochure

Master of Science

*with Minor in Business or Industrial
Engineering and Systems Management*

Yerevan
Republic of Armenia
2006

The Program

The AUA Computer and Information Science (CIS) program is an applied program to help students gain the necessary skills requisite to being productive leaders of the computing and related industries in Armenia. As such, the graduates are expected to have a broad training in the technical areas of the field, as well as in business, management and entrepreneurship. The program will leverage the offerings of the other AUA graduate programs to achieve this end.

The specific objectives of the CIS program include:

- to develop in the student the concepts of professional practice, innovation and enterprise
- to provide a sound base in the core principles of Computer and Information Science
- to make the student aware of technological trends and the emerging opportunities, as well as to instill in the student a sense of entrepreneurship to take advantage of these opportunities
- to develop in the student the ability to work in teams and to be organized in their approach to work

The program requirements include:

- Core courses to ensure that students have a sound base in the core principles of Computer and Information Science.
- Minor courses - drawn from the offerings provided by either the Business or Industrial Engineering and Systems Management programs. These courses

will allow students to explore other areas strongly connected to CIS.

- Elective courses to allow students to explore other areas of interest and
- Culminating Experience Requirement - either a Masters Project or Masters Thesis to demonstrate the synthesis of the programmatic concepts

A key feature of the program is the provision for students to engage in the practice associated with CIS. Such "practice" is realized in the practicum course requirements included in the curriculum. These practicum courses provide the students with an opportunity to gain "real world" experience by completing a project in industry (or, e.g., government agency). This experience will help the students to apply their knowledge, as well as better understand the social and cultural aspects of the field (which is critical to the successful completion of projects).

The Faculty and Resources

The CIS program at AUA draws upon the expertise of both visiting foreign and domestic professors. The faculty are primarily interested in teaching and applied research, and they bring many years of expertise to the classroom. Many of the faculty have made significant contributions to the advancement of scientific knowledge, hold important positions in professional societies, serve as consultants and advisors to industry and government, and have earned national and international recognition.

The computer facilities available to the CIS students are state-of-the-art. They support

Microsoft Windows, Unix and other relevant technologies. The machines are connected to the Internet, as well as a local area network including services to the entire university.

The Opportunities

Armenia is in a special position to participate, and excel, in economic opportunities derived from the knowledge-based industries. The government of Armenia has recognized this potential, assigning the expansion of the Information Technology (IT) industry high priority to aid in the development of the country. An Advisory Board for the CIS Program, consisting of Academic and IT industry leaders drawn, from both the United States and Armenia, oversees the continuing development of the program. The insight provided by the Advisory Board ensures that the program meets the evolving needs of the IT industry in Armenia where there is a high demand for well-qualified software developers.

The CIS program seeks to work in close cooperation with both the local IT industry, as well as the other local universities. This cooperative environment is evidenced by the sharing of resources such as open library facilities, ongoing seminar series with speakers drawn from both academia and industry, a concurrent enrollment program to allow software developers to enroll in our courses and special student exchange opportunities between the local universities.

The Engineering Research Center

The Engineering Research Center (ERC) is administered by the College of Engineering.

The ERC's aim is to conduct basic and applied research on technological problems that are relevant to the industrial and economic development of Armenia and its region. It brings together AUA visiting faculty, local scientists and engineers, and AUA students to collaborate on projects that are generated internally or funded by external sponsors.

Qualified students are employed as Research Assistants and gain valuable experience working alongside experts on projects related to their fields of study. In the process, visiting faculty, local scientists and engineers, and the students develop professional bonds that often permeate their future careers outside the University.

The Center has successfully completed a number of engineering projects -- industrial, earthquake, solar energy related
(<http://www.aua.am/aua/research/erc/index.htm>).

With the CIS program the Center plans to extend the facilities to provide platforms for conducting research in areas such as E-business technologies and Software Engineering issues.

For More Information

For information on admission requirements and the application process, please contact the AUA Office of Admissions and Student Academic Affairs, phone 51-27-93. To learn more about the College of Engineering, the Computer and Information Science Program, the Engineering Research Center, or careers for CIS graduates, please contact:

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We invite you to explore our web site for definitive text describing the programs of the College of Engineering at the American University of Armenia:

<http://www.aua.am>

<http://www.aua.am/aua/masters/ce/cis1.htm>

The definitive text describing this program is the one on our Internet site.