Facilities and Specialized Laboratories

The Department of Mathematics and Actuarial Science offers its students, professors and teaching assistants access to a variety of facilities and services to enhance their academic experience. The computer lab is open on weekdays from 8:30 am to 7:00 pm. The computer lab provides computers with internet access, Microsoft Office standard programs and specialized mathematics software. Students are eligible to receive a license to install the software required for their courses on their personal computers in order to facilitate their academic activities. In addition, lab users can request personalized accounts for storing their documents and files and can use the printing services in the lab.

Extracurricular Activities

Mathematical Learning Center: A facility staffed by teaching assistants for students in need of additional mathematics help.

Annual Math Competition: Open to undergraduate students at AUC and other local universities.

Why Join AUC’s Data Science Program?

AUC provides a quality, professional education that advances the ideals of American liberal arts and liberal science. An abundance of academic opportunities is characteristic of the AUC curriculum, which encourages the free exchange of ideas and promotes a spirit of open and ongoing interaction with scholars and 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 PhDs 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 AUC 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. AUC New Cairo offers world-class educational resources on a spacious, technologically advanced and environmentally sensitive campus.
The Department of Mathematics and Actuarial Science offers three undergraduate programs leading to the following degrees:

- Bachelor of Science in Mathematics*
- Bachelor of Science in Data Science
- Bachelor of Science in Actuarial Science*

In addition, it offers the following three minors:

- Bachelor of Science in Mathematics*
- Bachelor of Science in Data Science
- Bachelor of Science in Actuarial Science*

The Data Science Program is administered by a council of members from several departments, including:

- Computer Science and Engineering
- Chemistry
- Mathematics and Actuarial Science

The advances in communication and information technologies have given rise to the availability of huge datasets. The demand on a workforce knowledgeable in data science is the study of the implementable extraction of knowledge from data. It is a new multi-disciplinary field. A data scientist is a professional who is able to collect and analyze the correct and future type and form of data and solve the kinds of problems associated with them. Being able to transform and integrate disparate data sources into an integrated data set and apply sophisticated algorithms, the job of data science is to provide meaningful insights to businesses, governments, and individuals. Effective data science is the study of the generalizable extraction of knowledge from data.

Data scientists are not meeting the needs of those seeking training. (Hicks and Irizarry, 2017).

The demand for data scientists is currently nowhere greater than the supply. Data scientists are in high demand both locally and globally. The data science field is currently experiencing rapid growth due to the availability of huge datasets. The datasets contain a wealth of knowledge. Data scientists are being used by various industries to help their businesses make better decisions. The data science field is the study of the generalizable extraction of knowledge from data. It is a new multi-disciplinary field. A data scientist is a professional who is able to collect and analyze the correct and future type and form of data and solve the kinds of problems associated with them. Being able to transform and integrate disparate data sources into an integrated data set and apply sophisticated algorithms, the job of data science is to provide meaningful insights to businesses, governments, and individuals. Effective data science is the study of the generalizable extraction of knowledge from data.

Prospective Job Fields and Employers

- Business analytics, risk management, and business intelligence
- Information and data mining, business forecasting, and information technology companies
- Banks, insurance, and other financial institutions
- Consulting firms
- Government agencies
- Statistical and mathematical research centers.

Admission Requirements

- Students are admitted to the Bachelor of Science in Data Science on the basis of a competitive high-school grades and the successful completion of criteria courses. High-school students with a mathematics or science background are accepted based on their competitive high-school grades and the successful completion of criteria courses.
- Only 20 students are admitted every year. The total enrollments in four years is expected to be between 75 and 80.
- Students can declare the major at the gateway year. The total enrollments in four years is expected to be between 75 and 80.
- The academic requirements for admission to the Bachelor of Science in Data Science (A maximum of 122 credits are required for the bachelor of science in data science. This major requires several courses that are not counted in the credits) are: Mathematics 21, Statistics 21, English 11, and an additional 21 credits of the total 40 credits required.

Prospective Job Fields and Employers

- Business analytics, risk management, and business intelligence
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Graduation Requirements

- A total of 122 credits are required for the bachelor of science in data science. In addition to the major, please see the Bachelor of Science in Mathematics Brochure.

Academic Offerings

- The Department of Mathematics and Actuarial Science offers three undergraduate programs leading to the following degrees:
  - Bachelor of Science in Mathematics*
  - Bachelor of Science in Data Science
  - Bachelor of Science in Actuarial Science*

- In addition, it offers the following three minors:
  - Bachelor of Science in Mathematics*
  - Bachelor of Science in Data Science
  - Bachelor of Science in Actuarial Science*

Why should you pursue the Bachelor of Science program in data science?

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