



CALL FOR APPLICATIONS FOR ADMISSION

GRADUATE STUDY PROGRAM "MASTER OF SCIENCE in DATA SCIENCE"

Full Time and Part Time Programs 2024-2025/2024-2026

Data science is the study of data using computational and statistical techniques to answer questions, develop explanatory and predictive models, perform analyzes and communicate the results in an insightful way. Data science draws on a variety of disciplines such as computer science, artificial intelligence, statistics, economics and operations research. It applies quantitative methods to uncover relationships in data from business, medicine, finance, the social sector or other fields. Data science is a key driver of improvement in all areas of business, including strategy, operations, marketing, finance and human resource management.

The Master of Science in Data Science, the first of its kind in Greece, provides students with an in-depth focus in Data Science and allows them to tailor it to their interests. Students will interact with various faculty members and other students, conduct innovative data science projects, and be exposed to industry needs and real-world data science challenges.

The program focuses on computational and quantitative techniques and provides students with new opportunities to gain sustainable competitive advantage through data analytics. The full-time program consists of an academic year of coursework and a three-month analytics capstone project that allows students to work on a real-world data-intensive problem using the tools and skills learned in the program. The part-time program consists of two academic years of courses.

The program is offered jointly by the Departments of Computer Science and Statistics of the Faculty of Information Science and Technology of the Athens College of Economics and Business.

The Athens University of Economics and Business

The Department of Computer Science has existed in its current form since 1984 and focuses on innovative undergraduate and postgraduate education and research in the fields of information and computer science. Each year, about 200 undergraduate students and over 100 graduate students are admitted. Faculty members have an average of more than 20 years of academic teaching experience and have collectively authored more than 1,000 research publications that have received over 10,000 references from other researchers worldwide. More than half of the faculty members have been faculty members at leading American and other European universities.

The Department of Statistics was founded in 1989. Its goal is to offer an innovative and high quality undergraduate and graduate programme in probability and statistics. Each year, 120 undergraduate students are admitted and two graduate programmes are offered, with an excellent student-faculty ratio. The department enjoys an international reputation for the development of statistical methods, stemming from its history of significant contributions to research and teaching in statistics.



The Athens University of Economics and Business (AUEB) was founded in 1920. It is considered one of the most competitive universities in Europe in the fields of economics, business administration, computer science, statistics, marketing, accounting and finance. AUEB was the first Greek university to establish postgraduate programmes. Today, it has over 2000 students enrolled in 35 part-time and full-time master's degree programmes lasting 1 to 2 years. It is the first university in Greece to be awarded the Excellence rating according to the internationally recognised EFQM (European Foundation of Quality Management) model and has also received the corresponding Greek "Ever to Excel" rating. AUEB is by far the most international Greek university: it has the highest proportion of Erasmus students in relation to active students and many undergraduate and postgraduate students participating in the Erasmus and Erasmus+ programmes. It hosts one of the most active branches of AIESEC, through which it provides valuable opportunities for internships abroad.

Target audience

For the full-time program: Outstanding college graduates or mid-career professionals seeking further education with strong technical/mathematical skills in engineering, mathematics, statistics, finance, economics, operations research, and computer science. Potential students are passionate about collecting, measuring and analyzing information and want to focus on quantitative, computational methods to unlock the potential of data sets, identify patterns, make predictions and improve decision making. All applicants should have a record of academic success as evidenced by coursework and grades. Recent programming experience and basic knowledge of computer science is required.

For the part-time program: early and mid-career professionals (at least 2 years of full-time work experience) who want to take on the challenge of understanding and leveraging the flood of data in their organizations. All professionals (in the private or public sector) involved in collecting, measuring and analyzing information. Professionals, especially those in management consulting, retail banking, market research, quantitative marketing, IT, business intelligence, finance, operations, and managers focused on using data to extract business value. Recent programming experience and mastery of basic math concepts and quantitative techniques are required.

The Admissions Committee considers the totality of an applicant's experience, ability, personality and potential in arriving at a decision and seeks a diverse class of motivated students who can most benefit from and contribute to our rigorous program of study.

Application procedure and admission requirements

The application deadline for initial admission to the MSc in Data Science for this academic year (FT: 2024-2025/ PT: 2024-2026) is June 1, 2024.

After June 10, 2024, applications for the remaining places will be considered on a first-come, first-served basis until July 15, 2024. Each application is required to include the following:

- Completed application form with photo.
- Copy of all university degrees/diplomas received.
- Copy of transcripts of grades in Greek or English. Admitted applicants must provide official transcripts.
- Certificate of equivalency of degrees from foreign universities issued by DOATAP/Hellenic NARIC (or proof that an application for certification has been submitted -- admission is contingent upon submission of the certificate by the program enrollment deadline)
- Proof of English language proficiency: Certificate of Proficiency in English from the U. of Michigan/ Cambridge, or other equivalent (<https://bit.ly/3CG4ELy>)
- GRE scores (if available)
- Two letters of recommendation (to be sent by mail to the program administrator or by email to datascience@aueb.gr). For full-time students, two of the letters of recommendation must be from



college professors or researchers. For part-time applicants, it is recommended that at least one letter of recommendation be from a college professor or researcher.

- Proof of employment (optional for full-time programs, required for part-time programs)
- Curriculum vitae in English

Applications must be submitted online at <http://e-graduate.applications.aueb.gr/>. The documents must be uploaded together with the application or submitted in person to the following address before the application deadline: Graduate Programmes Office, Department of Computer Science, Athens University of Economics and Business, Evelpidon 47A & Lefkados, Athens 11362 Greece, 7th floor, office 707 (Monday-Friday 10:00-15:00, tel: (+30) 210-82.03.860, e-mail: datascience@aueb.gr).

For clarifications and further information, interested parties can contact the Secretariat or the Director by e-mail or telephone. Information about the program can be found at <http://datascience.aueb.gr/>.

The program does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, age or disability. Our non-discrimination policy applies to all phases of the admissions and scholarship process and to all aspects of educational programs and activities.

Program Structure

The Full Time (FT) program is a 1-year program. Students must complete 60 units of coursework, of which 46 units are core courses and 14 units are electives. Upon completion of coursework, students complete an intensive three-month integrated capstone project in collaboration with industry, co-supervised by academics and industry, consisting of 15 units. Attendance at lectures and lab sessions is mandatory.

The Part Time (PT) program is a 2-year program. Students must complete 75 units of instruction, of which 46 units are core courses and 29 units are electives. Under special circumstances, students may substitute 15 units with an integrated capstone project in collaboration with industry or a faculty-supervised research project if approved by the director. Compulsory classes are held twice a week from 18:00-21:00. Attendance at lectures and lab sessions is mandatory.

Full courses are worth 5-7 units, half courses are worth 3 units. Prior to beginning the program, students must complete 1-3 preparatory courses in statistics, mathematics, and computer science as determined by the Admissions Committee. Each course consists of 5 three-hour lectures and a final exam.

Tuition Fees

| Full-time program: €6000 | Part-time program: €7500 |
|--------------------------------|--------------------------------|
| €1000 payable by October, 2024 | €2000 payable by October, 2023 |
| €1500 payable by January, 2025 | €1500 payable by January, 2024 |
| €1500 payable by March, 2025 | €1500 payable by March, 2024 |
| €2000 payable by June, 2025 | €2500 payable by June, 2024 |



A limited number of merit-based scholarships are available. In addition, research and teaching assistantships worth €3000 may be offered to accepted full-time students who express interest, reducing tuition fees to €3000. Assistantships include 10 hours of academic work (e.g. helping with undergraduate courses, computer administration in a lab, data analysis for a research project, etc.) per school week, excluding exam weeks.

Tuition fees are non-refundable. Please refer to the Program Regulations Handbook for more details.

Athens, 13/03/2024

The Director of the Program

The Rector

Professor Vasilios A. Vassalos

Professor Dimitrios Bourantonis