



## **CALL FOR APPLICATIONS FOR ADMISSION**

### **GRADUATE STUDY PROGRAM "MASTER OF SCIENCE in DATA SCIENCE"**

#### **Full Time and Part Time Programs 2022-2023/2022-2024**

Data Science is the study of data through computational and statistical techniques, in order to answer questions, develop explanatory and predictive models, perform analyses and communicate the results in revealing ways. Data science draws from a wide variety of disciplines such as computer science, artificial intelligence, statistics, economics, and operations research. It applies quantitative methods to uncover relationships in data drawn from business, medicine, financial, social or other domains. It is a key driver of improvements to all aspects 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, offers students in-depth focus in data science while allowing them to tailor it their particular interests. Students will be interacting with diverse faculty members and other students, given the opportunity to complete innovative data science projects and be exposed to industry needs and real-life data science challenges.

The program focuses on computation and quantitative techniques and offers students new opportunities for building sustainable competitive advantage through data analysis. The full-time program consists of an academic year of taught courses and a 3-month long Analytics Capstone project that enables 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 taught courses.

The program is offered jointly by the Departments of Informatics and Statistics in the School of Information Sciences and Technology of the Athens University of Economics and Business.

#### **The Athens University of Economics and Business**

The Informatics Department has been in existence, in its present form, since 1984 and is focused on providing innovative undergraduate and postgraduate education, along with research for the information and computing professions. Each year, it welcomes approximately 200 undergraduate and over 100 graduate students. Faculty members have over 20 years of academic teaching experience on average and collectively have contributed more than 1.000 research publications, which have attracted over 10.000 references from other researchers worldwide. More than half the faculty have been faculty members in leading American and other European Universities.

The Department of Statistics was founded in 1989. Its purpose is to provide innovative and high quality undergraduate and postgraduate education in probability and statistics. Every year 120 undergraduate students are admitted, and two postgraduate courses are run, with excellent student to faculty ratios. The department has an international reputation for development of statistical methodology that has grown from its history of significant contributions to research and teaching in statistics.

Athens University of Economics and Business (AUEB) was founded in 1920. It is considered one of the most competitive universities, at the European level, in the fields of Economics, Business Administration, Informatics, Statistics, Marketing, Accounting and Finance. AUEB was the first Greek University to establish postgraduate studies. Today it enrolls over 2000 students in 35 part-time and full-time Master's level postgraduate programs with duration of 1 to 2 years. It is the first university in Greece to receive the distinction of Excellence, according to the internationally accepted EFQM (European Foundation of Quality Management)



Excellence Model, and it has also received the corresponding “Ever to Excel” Greek distinction. AUEB is by far the most international of Greek universities: It has the largest ratio of Erasmus students to its active student population, and a large number of undergraduate and postgraduate students participating in the Erasmus and Erasmus+ programs. 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: Excellent recent graduates, or midcareer professionals looking to upskill, with strong technical/math skills, from engineering, mathematics, statistics, finance, economics, operations research, and computer science. Prospective students get excited about gathering, measuring and analyzing information and want to focus on quantitative, computational methods to unlock the potential of data assets to reveal patterns, make predictions and improve decision-making. All applicants should have demonstrated academic success as evidenced by undergraduate and graduate courses and grades. Recent programming experience and basic knowledge of computing are necessary.

For the part-time program: Early- and Mid-career professionals (at least 2 years full time professional experience required) wanting to face the challenge of understanding and exploiting the deluge of data in their organizations. Any professional (in private or public sector) with a mandate to gather, measure and analyze information. Professionals especially in business consulting, retail banking, market research, quantitative marketing, IT, Business Intelligence, finance, operations as well as managers focused on using data to extract business value. Recent programming experience and facility with basic mathematical concepts and quantitative techniques are necessary.

The admissions committee considers the totality of a candidate’s experience, skills, personality and potential to reach a decision, aiming for a diverse class of motivated students who can most benefit from and contribute to our rigorous program of study.

## Application process and admission requirements

The first application deadline for the MSc in Data Science for this academic year (FT: 2022-2023/PT: 2022-2024) is **May 14<sup>th</sup>, 2022**. Acceptance letters will be sent out at the latest by June 30<sup>th</sup>, 2022.

In case there are remaining positions, applications will be reviewed on a first-come-first-served basis until **June 30<sup>th</sup>, 2022**. Any acceptance letters will be sent out at the latest by July 31<sup>st</sup>, 2022.

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. Accepted candidates must submit official transcripts
- Certificate of equivalence for degrees from foreign Universities, issued by DOATAP/Hellenic NARIC (or proof that an application for certification has been filed -- admission is contingent on submission of certificate by the Program enrollment date)
- Proof of knowledge of English: Certificate of Proficiency in English from U. of Michigan/ Cambridge, or other equivalent ( <https://bit.ly/3CG4ELY> )



- GRE scores (if available)
- Two recommendation letters (to be sent via post to the Program Administrator or via email to [datascience@aueb.gr](mailto:datascience@aueb.gr))
- Proofs of employment (optional for full time program, required for part time program)
- CV in English

**Applications should be submitted online at <http://e-graduate.applications.aueb.gr/>. Paperwork must be uploaded with the application or submitted in person before the application deadline at the following address:** Secretariat for Graduate Programs, Informatics Department, Athens University of Economics and Business, Evelpidon 47A & Lefkados, Athens 11362 Greece, 7<sup>th</sup> Floor, Office 707 (Monday-Friday 10:00-15:00, tel.: (+30) 210-82.03.860, e-mail: [aspnyridakou@aueb.gr](mailto:aspnyridakou@aueb.gr), Mrs Nancy Spyridakou).

For clarifications and any other information, interested parties may contact the Secretariat or the Director via e-mail or phone. 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 admission and scholarship process, and to all aspects of the educational programs and activities.

## Program Structure

The Full Time (FT) program is a 1-year program. Students need to complete 60 units of coursework, of which 46 units of core courses and 14 units of electives. After completion of coursework, students undertake an intense 3-month integrated Capstone Project in collaboration with industry, with joint academic and industrial supervision, for 15 units. Attendance of lectures and laboratory sessions is mandatory.

The Part Time (PT) program is a 2-year program. Students need to complete 75 units of coursework, of which 46 units of core courses and 29 units of electives. Students can under special circumstances replace 15 units of coursework with an integrated Capstone Project in collaboration with industry, or a faculty-supervised research thesis, with Director approval. Required classes take place twice a week, 18:00-21:00. Attendance of lectures and laboratory sessions is mandatory.

Full courses are worth 5-7 units, half courses are worth 3 units. Before the beginning of classes, students are required to complete 1-3 preparatory courses in Statistics, Mathematics, and Computer Science, as decided by the Admissions Committee. Each course comprises 5 3-hour lectures and a final exam.

## Tuition Fees

Full-time program: €6000	Part-time program: €7500
€1000 payable by October, 2022	€2000 payable by October, 2022
€1000 payable by January, 2023	€1500 payable by January, 2023
€1000 payable by March, 2023	€1500 payable by March, 2023
€3000 payable by June, 2023	€2500 payable by June, 2023

A limited number of merit-based scholarships is available. **In addition, research and teaching assistantships worth €3000 may be offered to full time accepted students who express interest, thus reducing tuition fees to €3000.** Assistantships involve 10 hours of academic work (e.g., helping with undergraduate classes,



computer administration in a laboratory, data analysis for a research project, etc.) per week of school, exempting examination weeks.

Tuition fees are non-refundable. More details can be found in the Program Regulations Handbook.

Athens, 14/03/2022

The Director of the Program

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Professor Vasilios A. Vassalos

The Rector

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Professor Dimitrios Bourantonis

\* The original signed document is at the Secreteriat's archive.