

Frequently Asked Questions (FAQs) (for the general public)

Q. What is the DAMA Program?

The Data Science and Machine Learning (DAMA) M.Sc. is a postgraduate study programme offered by the School of Science and Technology of the Hellenic Open University. The DAMA program aims to deliver knowledge and develop skills in Data Science and Machine Learning through state-of-the-art distance learning methods and computing tools.

Q. What will I learn in the DAMA Program?

Upon successful completion of the program, graduates will have gained:

- An understanding of the basic principles and methods of Data Science and Machine Learning.
- An ability to use method to collect, manage and analyse large volumes of data (big data).
- An ability to analyse big data and use it for classification and prediction purposes.
- An ability to use machine learning methods and optimization algorithms for decision making.
- An ability to develop machine learning algorithms for specific applications in a variety of scientific fields.
- An ability to use advanced methods for presenting findings to ensure a most effective analysis and communication.
- An understanding of the social and ethical aspects of analysing and presenting data, of privacy protection, of data management taking into accounts the regulatory framework governing such activities using computers, and of the protection of intellectual property.

Q. What are the benefits of completing the DAMA program?

Completing the DAMA program equips graduates with in-demand skills in data science and machine learning, prepares them for a variety of career opportunities in the tech industry, and enhances their ability to analyze and communicate complex data insights effectively.

Q. What are the admission requirements?

- A degree or diploma in a related discipline from an accredited higher education institution.
- Knowledge of English at a B2 level or higher, as the program is offered in English.
- Knowledge of an extra foreign language, good computer/Internet skills and feeling comfortable with math at an International Baccalaureate level are recommended.

Q. How long is the program?

The minimum study duration is two academic years.

Q. How many ECTS credits will I earn?

The program offers a total of 120 ECTS credit points (which is why it takes 2 full-time years to complete it).

Q. How much do I need to study?

The nominal workload for a module is 30 ECTS (1 ECTS is the equivalent of about 25-30 hours of workload, see: <https://education.ec.europa.eu/education-levels/higher-education/inclusive-and-connected-higher-education/european-credit-transfer-and-accumulation-system>). Of course, there is no such thing as an “average” student, but since 30 ECTS is the equivalent for a full semester, you are strongly advised to plan well in advance for accommodating ample time for study activities into your schedule. In other words, if you register for 2 modules in the same academic year (i.e. you plan to earn 60 ECTS), then that’s a full-time job (on top of other professional or personal obligations you may have). Your tutors will be supportive of you throughout, but they will also advise you to be firm when prioritizing your activities and HOU regulations do not allow for deadline extensions on grounds of excessive workload.

Q. What is the official language of the program?

The official language is English, including all material, assignments, and communications.

Q. How is the course structured?

The program is structured over two academic years and including four compulsory year-long modules:

- First Year: A module on Mathematics for Machine Learning and a module on Foundations in Computer Science.
- Second Year: A module on Algorithmic Techniques and Systems for Data Science and Machine Learning and a module on Numerical and Computational Techniques for Data Science and Machine Learning.

Q. Can I choose my modules?

Students may select one or two modules each academic year. HOU provides guidelines regarding module selection based on the year of study.

Q. What learning materials are used?

The program uses mainly established textbooks available online, supplemented by audiovisual and electronic materials specially adapted for distance education. These materials include aims, objectives, key concepts, self-assessment questions, exercises, and alternative teaching resources and are designed to support active learning. They also include self-assessment questions and exercises to reinforce understanding.

Q. How can I contact the program for more information?

For student records, you can email dama@eap.gr or call +30-2610-367302. For general information, you can email info@eap.gr or call +30-2610 367600. For technical issues, contact helpdesk@eap.gr. It is highly advisable to communicate via email.

Q. What is the instruction method used in the DAMA program?

The DAMA program employs distance education as its primary instruction method. It includes five tutorial meeting sessions held at weekends throughout the academic year, offering a blend of flexibility and direct interaction to accommodate students' diverse needs. Each session is about 4 hours long (including short breaks). Attending them is optional for students but very strongly encouraged. If you attend, you make the most of it if you have studied according to the study schedule beforehand. A session is devoted to interactions between students and their instructor, for a particular module, with each student group consisting of 20-25 students.

Q. Is there support available for distance learners in the DAMA program?

Yes, the DAMA program offers support for distance learners, including access to learning materials, contact sessions for interactive learning, and communication channels with instructors and peers for guidance and assistance throughout the course.

Q. Are there any prerequisites for joining the DAMA program?

There are no specific prerequisites for the individual modules within the DAMA program. However, a degree or diploma from related disciplines and a B2 certification in English are required for admission to the program. See earlier question on admission requirements.

Q. Can international students apply to the DAMA program?

As the official language is English, international students can apply to the DAMA program. The program welcomes graduates from recognized foreign educational institutions, provided they meet the admission requirements, including language proficiency in English.

Q. What is the application process for the DAMA program?

Prospective students must submit an application that includes their academic credentials, proof of English language proficiency (B2 certification), and any other relevant documents as specified in the admission requirements. The selection process evaluates these materials to determine eligibility for the program. Admissions are open during spring and late summer (2 periods) for the academic year starting in autumn (October).

Q. How is student performance evaluated in the DAMA program?

Student performance is evaluated through a combination of written assignments and final or resit exams. The average grade of written assignments contributes to 30% of the final grade, while the grade of the final or resit exams contributes to 70%.

Only students who submit at least half of the written assignments and attain a cumulative score of at least 50% over all assignments secure the right to sit the exam. The HOU study regulation stipulates further provisions for students who may need to re-enroll in a module.

Q. How does the DAMA program stay updated with the latest advancements in data science and machine learning?

The DAMA program curriculum is regularly updated to reflect the latest advancements and technologies in data science and machine learning. This ensures that students are acquainted with the most current methodologies and tools used in the industry.

Q. What career opportunities are available after completing the DAMA program?

Graduates of the DAMA program can pursue careers in various sectors, including technology, finance, healthcare, and academia, among others. They are well-prepared for roles such as data scientist, machine learning engineer, data analyst, and research scientist.

Q. Are there any opportunities for practical experience during the DAMA program?

Yes, the DAMA program emphasizes hands-on computational applications and offers opportunities for practical experience through projects, assignments, and the use of up-to-date computing tools and programming languages relevant to the industry. However, no industrial placements are foreseen in DAMA.

Q. Can I pursue further academic research after completing the DAMA program?

Yes, graduates of the DAMA program are well-positioned to pursue further academic research, including Ph.D. programs in data science, machine learning, and related fields. The program's strong foundation in both theoretical and applied aspects of these disciplines prepares graduates for advanced research opportunities.

Q. How does the DAMA program accommodate students from diverse scientific fields?

The DAMA program is designed to be accessible to students from all modern scientific fields, including natural sciences, engineering, informatics, humanities, and life sciences. It emphasizes hands-on computational applications and the use of programming tools that are relevant across different domains. Its use of mathematical and algorithmic constructs is focused on identifying and reinforcing key concepts in data science and machine learning.

Q. Are there any networking opportunities for students in the DAMA program?

Yes, the DAMA program provides networking opportunities through its contact sessions, online forums, and group projects. These settings allow students to connect with peers, faculty, and professionals in the field of data science and machine learning.

Q. How do students interact with faculty and peers in the DAMA program?

Students interact with faculty and peers through a combination of contact sessions, online forums, and email communication. This blended approach ensures that distance learners receive the support and interaction needed to succeed in their studies.

Q. What software and computational tools do students use in the DAMA program?

Students in the DAMA program use modern software and computational tools relevant to data science and machine learning, such as Python, R, TensorFlow, Keras, and SageMath. These tools are integrated into the coursework to provide practical skills in handling real-world data analysis and modeling tasks.

Q. Why does DAMA rely exclusively on online material? Can I print it?

The material we have selected is either available through the extensive subscriptions of the HOU library or through publishers and authors who have elected to make it freely available. Most of it is available for printing. HOU does not send out printed material for DAMA.

Q. Is there any financial aid available for students in the DAMA program?

Prospective students should inquire directly with the program administration or the university's financial aid office about available scholarships, grants, or other forms of financial assistance. Financial aid policies can vary, and some may be available to help offset the cost of tuition and materials.

Q. How does the DAMA program ensure the quality of its distance education?

The DAMA program ensures the quality of its distance education through a carefully designed curriculum, experienced faculty, and the use of effective learning materials and platforms. Regular assessments and feedback mechanisms are in place to monitor and improve the learning experience. DAMA, as a study program offered by HOU, is subject to all institutional policies on quality assurance (including an annual comprehensive internal assessment, with the anonymous participation of students),

Q. Can students access DAMA program materials from anywhere?

Yes, students can access the DAMA program materials online, allowing them to study from anywhere with an internet connection. This flexibility is a key feature of the program's distance learning model.

Q. After completing the DAMA program, can graduates access alumni resources?

Graduates of the DAMA program typically have access to an alumni network and resources, which may include career services, continuing education opportunities, and networking events. These resources can be valuable for professional development and staying connected with the academic and professional community in data science and machine learning.

Q. When is the re-enrollment period (declaration of new modules for existing students)?

As DAMA is an Annual Study Program (its modules run from October to June), enrolling into new modules takes place after the completion of the exam period until early- or mid- August.

Q. I have studied at the Hellenic Open University in the past and had to abandon my studies. Can I re-enroll and complete my studies?

You can re-enroll in the Study Program you had previously attended and request the recognition of the Modules you had successfully completed. If your request is accepted, you can continue your studies from where you left off.

Q. If I do not complete the module I have chosen, do I have to pay the participation fee again?

In study programs with an annual structure (such as DAMA), if you fail* in the final exams (June), you may participate in the resit exams (July); if you fail the resit exam too, the module is transferred to the next academic year (for exams only), without financial obligations.

If you have not secured the right to sit a module's examination (because you did not pass the threshold on assignment grades), then you must re-enroll in the module in a subsequent academic year, with full financial and educational obligations.

*Failure in exams is considered either not achieving a passing grade (at least 5 in the 0-10 range) or not participating in the exam.

Q. Are the learning materials sufficient for understanding the course content? What if I need additional resources?

While the program provides comprehensive learning materials, including textbooks and supplementary electronic resources, we encourage students to explore supplementary resources such as online tutorials, academic papers, and recommended readings. Access to the HOU library provides a wealth of supplementary texts and online materials.

Q. Will I gain practical programming experience?

Practical programming experience is a key component of the DAMA program. You will engage in hands-on exercises, assignments, and projects using programming languages like R and Python. These practical activities are designed to reinforce theoretical knowledge and provide practice in data analysis and machine learning techniques.

Q. Are there any opportunities to work on real-world projects or case studies?

The program includes assignments and projects that simulate real-world scenarios, allowing you to apply your knowledge to practical problems. These experiences are designed to prepare you for industry challenges and develop problem-solving skills.

Q. How are tutorial meetings scheduled, and can they be adjusted to better suit student needs?

Tutorial meetings are scheduled at intervals throughout the academic year, typically on weekends, to facilitate our students who may have professional obligations during weekdays. Each session is designed to cover key topics and provide opportunities for discussion and clarification.

Q. Are tutorial meetings recorded or available for later viewing?

Tutorial meetings are conducted live to encourage real-time interaction and participation. HOU does not record tutorial meetings.

Q. What should I do if I find the assignments challenging or not aligned with what we have covered in class?

Assignments are designed to challenge you and encourage independent learning, complementing the material covered in tutorial meetings and study materials. If you find an assignment particularly

challenging or feel it requires knowledge not yet covered, please contact your tutor for clarification and guidance. They can provide additional explanations or resources to help you complete the assignment successfully.

Q. How can I provide feedback on the course materials or teaching methods?

Your feedback is highly valued and essential for continuous improvement. You can provide feedback directly to your tutors or through formal channels such as anonymous module and tutor evaluations conducted by the university.

Q. Are there any resources for improving time management and study skills?

Tutors can offer advice on planning and prioritizing your studies.

Q. How does the program support students who are new to programming or specific software tools?

The program is designed to accommodate students with varying levels of experience. Introductory materials, tutorials, and supportive resources are provided to help all students, including those new to programming or specific software tools like R. Tutors are available to offer additional guidance and address any challenges you may encounter.