



TECHNICAL UNIVERSITY OF CRETE

Department of Electrical & Computer Engineering

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<https://www.mlds.tuc.gr/en/home>

**Call for Applicants for the Master's Program in *Machine Learning and Data Science*
Academic year 2023-2024**

The Department of Electrical and Computer Engineering at the Technical University of Crete invites applications for the Master's of Science degree program in [Machine Learning and Data Science](#) (MLDS) for the Academic Year 2023-2024 (October 2023 – May 2024). Applications can be submitted between April 1 and May 15, 2023. The results of the evaluation will be announced by the end of May 2023. Classes will start the first week of October.

Tuition fees: 500 euros for residents of the European Economic Area (EU countries, Iceland, Liechtenstein and Norway) and 1.000 euros for non-residents.

Courses (Fall semester / Total 30ECTS)

- Probability Theory & Introduction to Machine Learning (7ECTS)
- Practical Data Science and Applications (7ECTS)
- Programming and Database Fundamentals (7ECTS)
- Optimization (7ECTS)
- Research seminar / Independent Study / Capstone project (2ECTS)

Courses (Spring semester / Total 30ECTS)

Required courses

- Machine Learning (Required, 7ECTS)
- Research seminar / Independent Study / Capstone project (Required, 2ECTS)

At least two courses from Group A

- Big Data Processing and Analysis (7ECTS)

- Time Series Modeling and Analysis (7ECTS)
- Probabilistic Graphical Models and Inference Algorithms (7ECTS)
- Detection and Estimation Theory (7ECTS)

At most one course from Group B

- Advanced Concepts in Machine Learning and Pattern Recognition (7ECTS)
- Online learning and Dynamic Optimization (7ECTS)
- Decision Making and Learning in Multiagent Worlds (7ECTS)
- Quantum Machine Learning, Optimization and Applications (7ECTS)
- Quantum Information and Quantum Estimation (B, 7ECTS)
- Secure Systems (7ECTS)
- Nonlinear Systems (7ECTS)

APPLICATIONS

The MLDS program accepts students with a strong background in computer science, software engineering, statistics and applied mathematics. Suitable candidates should hold a recent University degree in Computer Science, Computer Engineering, Electrical Engineering, Telecommunications, Physics, Mathematics, Applied Mathematics, Statistics, and Econometrics or a similar field. The applicants are expected to have at the very least some knowledge of programming fundamentals. You can apply during the application period via the online platform at

https://e-graduate.tuc.gr/iMScApplication/masters?lang=en_US

To apply for MLDS, scroll down to School of Electrical and Computer Engineering (Postgraduate Studies) and select MASTER OF SCIENCE IN MACHINE LEARNING AND DATA SCIENCE.

Required documents for application

1. An application for the Master of Science in Machine Learning and Data Science submitted to the Office of the School of Electrical and Computer Engineering (via the online platform https://e-graduate.tuc.gr/iMScApplication/masters?lang=en_US).

2. A copy of your university degree or diploma.

- If the degree was awarded by a foreign university, an attestation of equivalence from the Hellenic National Academic Recognition and Information Center ([DOATAP](#)) must also be submitted. (The attestation of equivalence is needed for graduation.)

- If you do not yet have your degree or diploma, but you expect to obtain it soon, you can still apply and mention your expected graduation date in your application. In this case, you could be conditionally admitted pending submission of a copy of your degree or diploma.

3. Copies of recognized postgraduate degrees (if applicable).

4. Certified transcripts for undergraduate studies and (if applicable) postgraduate studies.

5. A copy of a certificate confirming good or excellent knowledge of the English language (at least B2 level, preferably higher).
6. Curriculum vitae including professional experience (if applicable).
7. A summary of your thesis/dissertation (if a thesis or dissertation has been completed), a brief statement of your scientific and professional interests, and a statement of the reasons you are interested in pursuing postgraduate studies.
8. Copies of scientific publications and awards (if applicable).
9. At least two and preferably three letters of recommendation, at least two of which must be obtained from teaching staff in the department awarding the degree.
10. A photocopy of your government-issued identity card or passport.
11. A photograph of you (attached to the application form).

The Director of the [MLDS Studies Program](#)

of the ECE Department

Professor Dionissios Hristopoulos