POST GRADUATE PROGRAMME
MPhil in
«Computer Science and Informatics»

HAROKOPIO UNIVERSITY

Harokopio University is, in chronological order of establishment, the 18th University in the country. It was founded in 1991 on the initiative of Professor Georgios Karabatzos (†2011). Harokopio University is named after the national benefactor Panagis Harokopos, a cosmopolitan Greek of the diaspora, with a European orientation, who envisioned an educational institution with excellent building infrastructure and equipment, in harmony with the natural environment, which would offer the most modern science. Thus, the possibility was given for the full utilization of the assets of the testators, on the one hand, Panagis Harokopos, and on the other Evanthia Harokopou-Petroutsis, by their will.

Harokopio University provides high-level studies, both at the undergraduate and postgraduate levels. Embracing the vision of Panagis Harokopos, the study programs focused on different areas of human activity to improve the quality of life. Great importance is attached to ensuring modern infrastructure and seamless conditions for carrying out educational work and strengthening the cooperation between students and teachers.

The Harokopio University is housed in a privately owned complex, bequeathed by the testators, with an area of approximately 20 acres, on El. Venizelou 70, in Kallithea, is very close to the center of Athens. It is easily accessible by all means of public transport and very close to the METRO station "El. Venizelos – Taurus).

Research at the University

The Foundation promotes both basic and applied research that contributes to the advancement of science, as well as the provision of scientific, research, and technological services. The Foundation also encourages the undertaking and execution of scientific, research, and technological projects financed by or carried out within the framework of international organizations and agencies. Every type of research conducted at the Foundation is characterized by transparency, while its results are public and accessible to the members of the University Community, who can use them respecting in every case and to the greatest extent possible the rules and provisions of the Greek, Community, and International Law on the protection of the author's intellectual property.

THE DEPARTMENT OF INFORMATICS AND TELEMATICS

The Department was established in 2006 to advance Computer Science, primarily in the field of web/telematic applications, big data, machine learning, and web-centric applications. The Department emphasizes application areas such as Internet technologies, digital transformation, e-business, e-government, e-health, smart transportation, etc.

The global market needs executives with broad training in web and internet technologies to support the design and development of complex information systems and advanced services. Graduates of the Department have a complete set of scientific and technical skills directly related to the fields of application of Information Science and are therefore able to meet

the modern demands of the labor market. The Department encourages students to develop innovative services with open-source platforms through their thesis under R&D projects and/or to contribute to the University's e-services ecosystem.

The professional rights of the graduates of the Department correspond to those of all the University Departments of the country in the subjects of Informatics and Telecommunications.

The Department focuses on the study of the application, use, and impact of digital technology in different areas of human activity. For this purpose, the design, development, and integration of standard methods and tools of computer and telecommunications technology are required to provide modern telematics applications.

Research in the department

The Department is a recognizable research unit both nationally and internationally, active in various cutting-edge research areas related to IT and its applications. The research carried out in the department includes the following areas:

- Data management, artificial intelligence/machine learning and computer vision, statistics and applications
- Algorithms, techniques, and programming languages.
- Information systems (management, distributed computing, supply chain, e-commerce, simulation, systems security)
- Cloud computing (distributed computing, design and performance study of architectures and services, programming techniques and optimization, techno-economic analysis)
- Communication networks and the Internet of Things (wireless and wired technologies and applications, cyber-physical systems, intelligent transport and autonomous vehicles, smart city applications, e-health).

The Department aims to promote research in these fields to support integrated technological solutions and their efficient exploitation in modern society. For this purpose, it has drawn up a specific strategic plan for research in the medium and long term, giving priority to application areas related to its expertise.

To achieve the goals, the department systematically carries out a series of actions that strengthen its research character such as:

- Participation in research/development projects financed by national and European resources, as well as private bodies.
- Collaboration with other Departments of the University (Department of Geography and Department of Dietetics and Nutrition Science) for the submission of research proposals as well as the execution of research projects.
- Conclusion of cooperation protocols with Research Organizations and Universities from the European and international areas.
- Establishment of scholarships for students and PhD candidates.
- Institutionalizing and organizing the mobility of students and researchers in Europe and internationally, through Erasmus and Erasmus+ programs, making use of the University's existing partnerships and entering into new ones.

- Organization of conferences
- Connection with the labor market and society through openness, research, and development actions.

The MPhil in "Computer Science and Informatics"

The objective of the MPhil Programme in "Computer Science and Informatics" is to perform research in Computer Science and Informatics. The ultimate goal of Programme is the specialization of postgraduate students in cutting-edge research topics in the subjects of the School of Digital Technology, such as indicatively in its research fields with courses in Data Science, Computational Intelligence and Cognitive Computing, Software Systems and Algorithms, Embedded Systems and Robotics, Computing Infrastructures, Services and Systems, Systems Security and Cryptography, Technology Management, Systems Technology, Communications, and Network Technologies, Internet of Things, etc.

The MPhil in "Computer Science and Informatics" has as its subject:

The promotion of knowledge, the development of research, and the preparation of specialized scientists for post-graduate studies at doctoral level at home or abroad.

- The training of specialized scientists in research methodologies and modern practices and their application in industrial production and entrepreneurship.
- The development and improvement of specialized individual and work skills in the subjects covered by the program.
- The interconnection of the participants with the research inside and outside the Foundation, in collaboration with other Universities, Research Centers, Businesses, and Institutional State Structures at the national and international level, which deal with the issues of the program.

The program is addressed to graduates of departments of Computer Science, Information Technology, Computer Engineering, Positive Sciences, and related subjects, and aims to provide a high level of knowledge related to Computer Science and Information Technology and to develop research skills to strengthen their research background in the basic subjects taught at the undergraduate level and lead them to research and the labor market with enhanced knowledge and skills in the fields dealt with by the program.

The program awards a 90 ECTS Master's Degree in Computer Science and Informatics (MPhil in Computer Science and Informatics).

Human resources

The Department has 19 appointed faculty members (5 Professors, 6 Associate Professors, 7 Assistant Professors, and 1 Lecturer) and the appointment of 3 more faculty members is imminent. All faculty members actively participate in the teaching and research activities of the PMS, while there is also collaboration with 2 external lecturers. The Secretariat of the Department that supports the program is staffed by 5 administrative employees and has 2 teaching assistants. At the same time, there are technical, teaching, and research support associates offering their services to the Department, financed in practice by research and development projects of faculty members.

The academic subjects of the faculty members cover a wide range of research subjects in the field of Computer Science and Informatics. The faculty members themselves have several scientific publications and awards, while they participate in dozens of European, National, and International research projects. They are members of international scientific associations (ACM, IEEE, etc.), and have from time to time held important positions in National and European bodies.

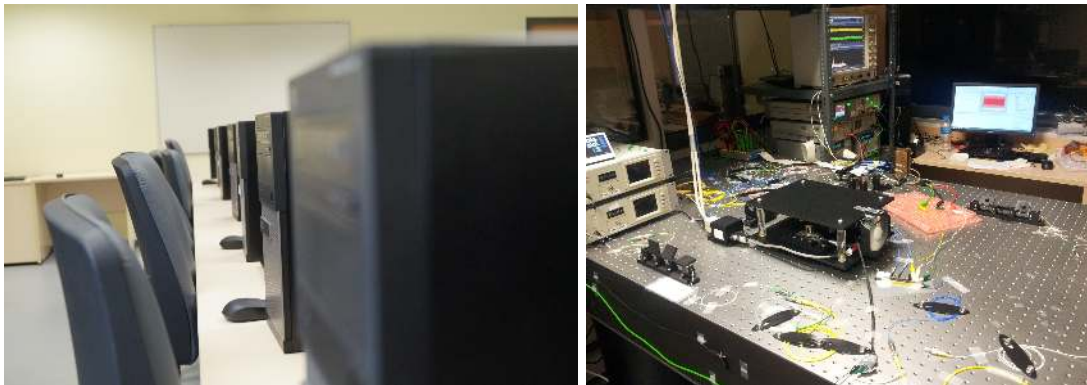## 7 reasons to choose the MPhil in "Computer Science and Informatics"

1. The policy of the Department is to contribute to the encouragement of research and the production of innovation as well as extroversion as a basic philosophy.
2. It has a modern curriculum that responds to the challenges of science and technological developments. The thematic sections closely follow the developments of international research and focus on cutting-edge issues.
3. It has a very good student/teacher ratio, while the average age of faculty members does not exceed 40 years, thus cultivating an excellent spirit of student-teacher cooperation.

4. It has a privately owned building with modern laboratories and educational infrastructure.
5. The curriculum is designed to provide both comprehensive university-level knowledge as well as the practical skills necessary for research.
6. The knowledge and the level of the studies allow the continuation of the studies at the doctoral level making full use of the knowledge acquired.
7. Absorption of graduates in the labor market with very high rates, but also the possibility of involvement in the department's research activities and projects.

Infrastructure & Central Services

The students of all three cycles of study acquire a username and password upon registration with which they have access to all the electronic services provided by the University and the state. The University's Informatics and Networks Center undertakes the registration of the students in the University's user directory (LDAP) and then creates an access code that the students can receive from the secretariat of the relevant Department or electronically in a way that is determined by the N.O.C. The use of passwords and usernames is strictly personal.

University students have access to various categories of services such as the following: a) basic electronic services such as e-mail, website hosting, creation and storage of files and data in the computing cloud, b) e-learning services, c) access services to electronic resources and d) use of applications provided by the University for all members of the academic community.

Communication

Postal Address: 9 Omirou Street, Tavros, 17778 (2nd floor)
Tel.: +30 210 9549400, +30 210 9549402
Email: mphilsec@hua.gr

Access

The Department is housed in the newly built University building at 9 Omirou Street, in Tavros. The building is located at a distance of 800 meters from the main complex of Harokopio University on El. Venizelou 70, in Kallithea.

Social Networks of the Department

The Department has a significant presence on social networks through its official pages which are the following:
- https://www.facebook.com/ditharokopio/
- https://www.linkedin.com/company/77699385
- https://www.youtube.com/channel/UCEHkYirpXF1nSLxDCrfDZ4A
- https://www.instagram.com/dithua/

Candidates can submit their applications online within May - June every year at the link:
https://application.hua.gr/
The invitation is posted on the main website of the Program in the Announcements section:
https://mphil.dit.hua.gr/ανακοινώσεις/

HAROKOPIO UNIVERSITY
DEPARTMENT OF INFORMATICS & TELEMATICS

MPHIL

Master by Research
in

"Computer Science and Informatics"

APPLICATIONS

May and June every year

https://application.hua.gr/

OBJECTIVES

- Specialization in research topics
- Develop research skills
- Preparation for PhD studies

https://mphil.dit.hua.gr

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