QUALITY POLICY STATEMENT
DEPARTMENT OF ELECTRICAL, MECHANICAL AND COMPUTER ENGINEERING-DUTH

The Department of Electrical and Computer Engineering (ECE) in collaboration with the Quality Assurance Unit of the Democritus University of Thrace (DUTH) and the competent services of the Institution, has harmonized the Quality Policy of the Undergraduate Program with the Quality Policy of DUTH.

Link to the quality assurance policy of the PSP:

https://quantum.ee.duth.gr/wp-content/uploads/%CE%A0%CE%BF%CE%BB%CE%B9%CF%84%CE%B9%CE%BA%CE%B7-%CE%A0%CE%BF%CE%B9%CE%BF%CF%84%CE%B7%CF%84%CE%B1%CF%82_%CE%94%CE%A0%CE%9C%CE%A3.pdf

Mission

The Department of Electrical and Computer Engineering is committed to working closely with students, businesses, authorities and society to disseminate knowledge for the common good, improve everyday life and provide solutions to address the ever-increasing global challenges related to the ever-growing field of Electrical and Computer Engineering. The Department of Electrical and Computer Engineering of DUTH collectively contributes to the local and overall Greek society, as it focuses on modern education through student-centered learning based on actions and experience, but also incorporates the digital transformation of sciences and professions as inherent in the character and constantly expanding field of Electrical and Computer Engineering. Therefore, the Department of Electrical and Computer Engineering of DUTH has as its mission the continuous education of students for the development of integrated scientists in Electrical and Computer Engineering. The graduate of the Department of ECE is capable of performing all necessary measurements (electrical, electronic, electromechanical, computational-network) and of evaluating, developing and interconnecting systems for monitoring, simulating and operating electrical, electronic, electromechanical systems as well as computer and telecommunications systems.

It has the ability to deal with the study, supervision and construction, certification, control, inspection, maintenance and calibration of systems for the production, transport, distribution, storage, processing, control and use of energy and information, which are found in electrical and other installations, in electronic applications, in telecommunications, in information and computer systems, etc., which are systems critical for the protection and improvement of the life, health and property of citizens and improve the quality of human life. In particular, graduates of the Department of ECE of DUTH with the successful completion of the curriculum, in addition to the basic knowledge of the science of Electrical and Computer Engineering and the ability to practice their profession, they have been trained to have the ability: to successfully apply their knowledge in practice, to search, analyze and synthesize data and information using appropriate modern technologies, to adapt to new situations, to be informed about developments and make decisions, to work autonomously or by participating in teams in a local, international and interdisciplinary environment, to design and manage projects of various sizes and complexity, to generate new ideas in research and

generally to promote free and creative thinking (The above in detail and especially with regard to the qualities are also referred to in the "Appendix to the Diploma of Studies of the Department of ECE DUTH). Consequently, the Department of ECE of DUTH, as it should, prepares its graduates, following developments on a global scale in all areas of science, research and the profession of Electrical and Computer Engineering, making its graduates eligible and competitive in the job market and in the academic environment. The Department of ECE of DUTH provides excellent education and research, with a balance in learning and application, through a modern and fully competitive curriculum at an international level, integrating teaching methods and subjects corresponding to the most established neighboring Departments of International Institutions. Studying at the Department of CEC of DUTH constitutes a modern educational experience for students as the Department has: (a) modern facilities and laboratories, (b) highly qualified and internationally renowned scientific staff, (c) distinctions of scientific staff and students at international and national levels, (d) internal quality system, (e) extensive student care, (f) presence in international university ranking lists, with a distinguished position in the evaluation of Greek university education.

The MSc in Quantum Computing and Quantum Tevhnologies is part of the strategic planning of the Department of ECE of DUTH. It is governed by scientific coherence and aims to further promote knowledge, develop science, research and technology and provide high-level training in the scientific and technological fields of Quantum Computing and Quantum Technologies.

Vision

In accordance with what the Department seeks to promote through its successful operation, its vision is the continuous provision of quality, the pursuit of excellence and distinctions of its staff, students and graduates, making the Department a pioneer on the map of higher education both in Greece and in Europe. The Department invests in student-centered learning, the educational process, human resources, excellent laboratory facilities, but also in various ways in research, contributing to society and successfully facing the challenges of the modern era using all the necessary means of modern digital technology.

The purpose of the program is to further promote knowledge, the development of science, research and technology and to provide high-level training in the scientific and technological fields of Quantum Computing and Quantum Technologies. The MSc in Quantum Computing and Quantum Technologies aims to provide high-level postgraduate studies and consequently to provide its graduates with the appropriate theoretical and practical skills.

Curriculum

The objective of the Department's Post graduate program is:

1. The creation of a strong background in the science of Electrical and Computer Engineering, through a student-centered educational process that includes knowledge (classical, applied or at the cutting edge of technology), the acquisition of experience and practical application, the analysis, synthesis and evaluation of data, limitations and possibilities,

2. the preparation and direction of the professional career, eligibility and competitiveness of its graduates through the understanding of science, with the assistance of modern technological means and corresponding competent teaching methods, based on bibliography, research and modern digital media,

3. the development of the skills of its graduates in the modern digital era and within the constantly developing society, the constantly expanding and diverse cognitive subject of Electrical and Computer Engineering, the rapid increase in the required knowledge, as well as the changing demands of the labor market, so that they can constantly evolve intellectually and scientifically, taking part in the fourth industrial revolution with continuous training and self-improvement,

4. knowledge with research as a tool (basic and applied) both in areas of the science of Electrical and Computer Engineering and in interdisciplinary fields, which are inextricably intertwined with the modern cognitive and expanded subject of the science of Electrical and Computer Engineering, constantly monitoring the developments of science and decisively expanding its scope of application as defined by the modern rapid evolving, from a technological point of view, everyday life,

5. its contribution to the effort to reconstruct and develop the wider and particularly sensitive region of Thrace, but also the country in general, in collaboration with a multitude of local and generally productive bodies and businesses, through self-activity, teamwork, excellence, research, innovation, production and entrepreneurship.

It is worth emphasizing that in terms of the study content provided and its mission, the Department of ECE of DUTH:

1. It has promptly adopted the credit system (ECTS), in accordance with the international Bologna agreement,

2. It includes a multitude of courses within the framework of the postgraduate programs, in which student performance is assessed through actions, assignments, mid-term exams, alternative exams, laboratory exams, laboratory projects, and not only with a final written exam (formative assessment),

3. It uses experiential learning methods of recognized value (such as, for example, educational trips, experiential workshops, laboratory tests, etc.),

4. It provides courses integrated into the postgraduate programs, which in their absolute entirety are accompanied by detailed course outlines, which clearly state the subjects, learning objectives and expected results, while the additional activities and the part of the ECTS covered by them (assignments, progress, workshops, extracurricular activities, exams, etc.) and

5. Grants a Diploma Supplement in Greek and English.

All of the above have already been verified and awarded by the HAHE in the context of the recent certification for the integrated master (one of the two nationwide Departments of Electrical and Computer Engineering that received the approval of HAHE), as well as by the subsequent issuance of the declaratory decision for the affiliation of the Department of ECE of DUTH to the provisions of par. 1 of article 46 of law 4485/2017 (A'114). They can also be verified from the items listed in the annexes to this proposal.

The Department of ECE of DUTH has, over the years of its operation, adopted a well-organized and highly efficient daily routine, which is the result of a well-established institutional framework for operation, and has taken care to transmit this culture to new members of its teaching and scientific staff. For example, the dates of the General Assemblies, as well as the other administrative bodies, have been determined regularly, allowing participants the opportunity to effectively define their weekly schedule and without losing teaching hours. There is also an established culture of cooperation in the Department. This is reflected both through the broad participation of members in the committees established to serve the competent bodies, and through the work produced. The established committees prepare the issues that arise and, after thorough investigation and thorough examination, make relevant recommendations to the competent bodies and ultimately to the General Assembly of the Department, which is ultimately responsible for making the relevant decisions.

At the same time, at the level of automation of the workload and computerization of the Department, a series of good practices have been adopted which, among others, are linked to the use of information systems available at DUTH, such as: a) the Electronic Protocol System of the Electronic Secretariat, b) the Student Register and the corresponding Grading System of the Electronic Secretariat (ClassWeb-Cardisoft), c) the Integrated Information System of the Quality Assurance Unit of DUTH, d) the Project Management Information System (resCom) of the E.L.K.E. of DUTH, e) the Information System of the D.U.T.H. Library, f) the Information System of the D.A.STA. of the University of Thrace, g) the Electronic Assessment Information System of the Department of Mechanical Engineering of the University of Thrace, h) the electronic asynchronous distance learning platform (eclass) of the Computer Center of the University of Thrace and i) the electronic mail (webmail) of the Computer Center of the University of Thrace. Regarding all the aforementioned information systems, standard procedures and decisions are followed, as they arise from the respective competent bodies of the University of Thrace, in which, if possible, representatives of the Department participate. The logistical infrastructure of the Department is modern and in excellent condition. The same applies to the logistical infrastructure of the laboratories, which is in very good condition, while it is renewed and maintained from time to time. The renewal of equipment is financed from various sources, such as funds from national and international competitive research programs, from equipment funding from the East Macedonia and Thrace Region or the central government, and from the regular budget of the DUTH. Any individual malfunctions are dealt with immediately and effectively by the President and the General Assembly of the Department with the aim of continuing the smooth, robust and uninterrupted operation of the Department. For example, the method of making up for courses that may have been missed due to force majeure is decided by the General Assembly of the Department, in order to cover the thirteen (13) weeks of teaching provided for by the Law. Finally, there are regulations for the preparation of a thesis, internships, Erasmus+ mobility, awarding prizes, annual research days, etc. which are posted on the Department's website and, in some appropriate cases, on the websites of the competent Departments of DUTH. Therefore, there are institutionalized and predetermined procedures and rules for the selection of students and all procedures are completely transparent.

The strategic objectives of the Department of ECE and its postgraduate programs are linked to those of the Institution and include:

• Providing high-level education, with an emphasis on student-centered learning, the continuous upgrading of the Master's Program through the institutionalized process of reviewing the Master's Program by the Department of Education and Research of DUTH and the updating and standardization of academic functions, focusing on Learning Objectives and Learning Outcomes,
• improving the connection with the labor market, scientific institutions and graduates of the Department,
• improving the production of high-level research based on international developments through the promotion of research collaborations and the exploitation and distribution of research results for the benefit of the economy and society,
• strengthening the Department's funding through international and national competitive research programs from public and private institutions,
• promoting and recognizing excellence and innovation, through encouraging, supporting and rewarding the achievements of students and members of the university community in teaching and research, successes in student competitions, distinctions in competitive procedures for submitting innovative proposals, student work awards, etc.,
• strengthening the extroversion by strengthening and promoting collaborations, networking activities and publicizing the Department's international presence. Particular emphasis is placed on distinguishing the Department at local, national and international levels, and on strengthening it through internationalization actions and comparative evaluations with Departments of other Universities of similar size,
• enhancing the efficiency of administrative procedures and improving the infrastructure (building, laboratory and generally technological) of the Department, giving priority to Student Welfare and the strengthening-upgrading of laboratory and educational equipment,
• creating a particularly attractive and successful profile, which makes the Department and its graduates unique in relation to similar higher education Departments in Greece, attracting more students,
• cultivating a two-way offer between the academic community and students/graduates,
• cultivating a culture of quality and excellence.

In conclusion, the strategic planning of the ECE Department of DUTH is summarized in the following:

1. Strengthening-upgrading the educational work
2. Strengthening-upgrading research and innovation
3. Improving the amount and process of absorption of funding
4. Strengthening-upgrading human resources
5. Strengthening-upgrading and improving the management of the infrastructure and the services provided by the Department through and by the Foundation

The MSc in Quantum Computing and Quantum Technologies aims to provide high-quality postgraduate studies that will enable its graduates to: on the one hand, pursue a research or academic career in the area of Quantum Computing and Quantum Technologies, continuing their studies at the doctoral level, and on the other hand, to engage professionally in the field of Quantum Computing and Quantum Technologies, remaining creative and productive in an environment of rapidly changing technology. Furthermore, the purpose of the MSc in

Quantum Computing and Quantum Technologies is the dissemination of knowledge and research at national, European and international levels and the establishment of collaborative ties between DUTH and the NCSR DIMOKRITOS with National and European Educational and Research networks, as well as its contribution to the modernization of industry and society through its interaction with productive and other social actors, which will result in the transfer of know-how, the promotion of innovation and the general satisfaction of the educational, research, social, productive and developmental needs of the country.