



ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ

UNIVERSITY OF WEST ATTICA
SCHOOL OF ENGINEERING
DEPARTMENT OF INFORMATICS AND COMPUTER ENGINEERING

INTER INSTITUTIONAL
DOUBLE DEGREE MSc PROGRAM
in CYBERSECURITY

MSc STUDY GUIDE

AIGALEO, 2023

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ABBREVIATIONS

CC	Coordinating Committee
CEC	Candidate Evaluation Committee
CS	Computer Society
DipT	Diploma Thesis
EPY	Greek Computer Society
HAHE	Hellenic Authority for Higher Education
ICE	Informatics and Computer Engineering
SEPE	Federation of ICT Enterprises of Greece
SRFA (ELKE)	Special Research Funds Account

INTRODUCTION

Cybersecurity refers to the protection of information systems, data and digital assets from risks arising from cyber-attacks, malware, data breaches and other digital threats. Today's technological development with the use of 5.5G networks, big data, the internet of everything and privacy enforces cyber security by providing:

1. **Protection of Information Systems:** Cyber attacks can cause serious damage to information systems, from disrupting services to stealing sensitive data.
2. **Data protection:** Personal and business data is a target for cyber attacks. The leakage of this data can have serious implications for the privacy and security of individuals and organizations.
3. **Critical Infrastructure Protection:** Critical infrastructures such as energy networks, water supply, telecommunications and health systems depend on information systems. Protecting these infrastructures requires effective cyber security measures.
4. **National Security Protection:** Cyber-attacks can have serious implications for national security. States can use cybersecurity to identify and address cyber threats.
5. **Financial Security Protection:** Cyber attacks can have financial consequences as they can cause losses to businesses and government systems.
6. **Protection of Individual Privacy:** Citizens and businesses must be able to use technology safely, without facing the risk of having their privacy violated.

At the same time, Cybersecurity acquires a critical position in the functioning of the international economic system. It is a common finding that IT Engineering services need to be staffed with staff equipped with the skills and abilities needed to effectively deal with modern threats.

The postgraduate program operates in accordance with the high educational standards of postgraduate studies provided by internationally recognized Universities in the field of education. It has an interdisciplinary character aimed at students acquiring those resources that will allow them to understand and delve into the complex issues of Cybersecurity, to develop skills to successfully deal with problems and to be able to propose alternative actions to improve the Engineering sector in our country.

On behalf of all the staff of the Department of Information and Computer Engineering, we congratulate you on your success in studying the Master's Program in Cybersecurity.

1. Information about the Department of Informatics and Computer Engineering

1.1 Department's Name and address

The Department of Informatics and Computer Engineering of the School of Engineering of the University of West Attica is located in Egaleo, Campus I, Egaleo Park, 28 Agiou Spyridonos Street, GR-12243 Aigaleo, Building K16.

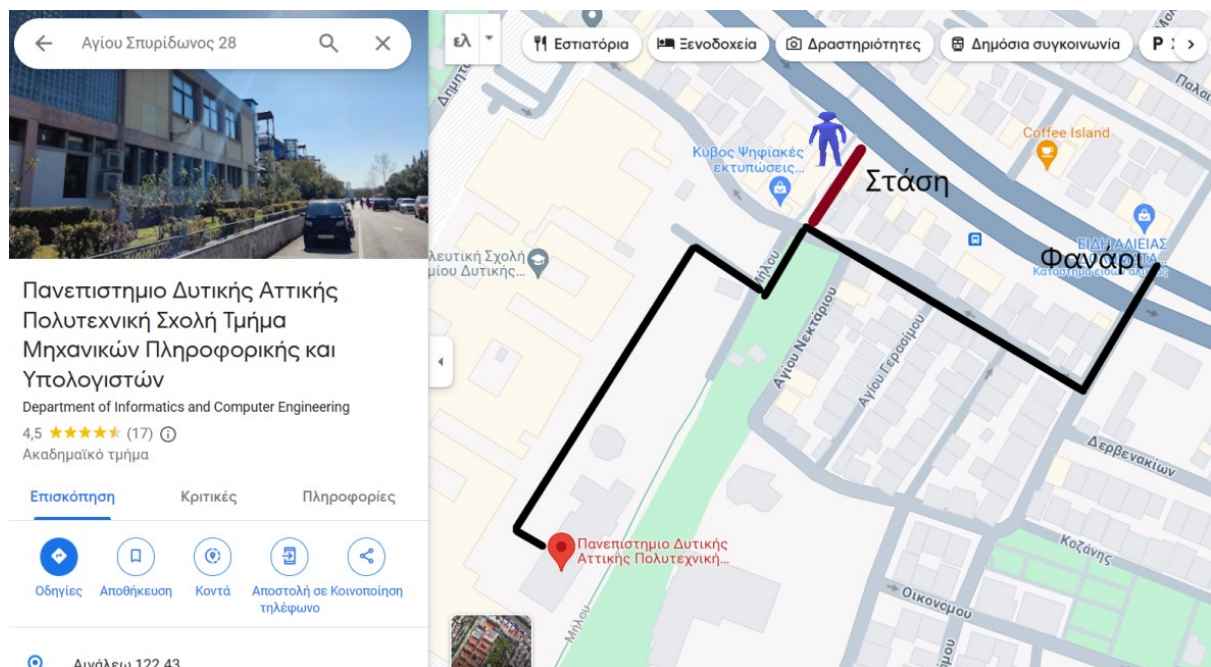


Figure 1: Locating and accessing the Department

1.2 The 2023-2024 Academic Calendar

WINTER SEMESTER

1st week	26.09.2023 – 02.10.2023
2nd week	03.10.2023 – 09.10.2023
3rd week	10.10.2023 – 16.10.2023
4th week	17.10.2023 – 23.10.2023
5th week	24.10.2023 – 30.10.2023
6th week	31.10.2023 – 06.11.2023
7th week	07.11.2023 – 13.11.2023
8th week	14.11.2023 – 20.11.2023
9th week	21.11.2023 – 27.11.2023
10th week	28.11.2023 – 04.12.2023
11th week	05.12.2023 – 11.12.2023
12th week	12.12.2023 – 18.12.2023
	CHRISTMAS holidays
13th week	12.01.2024 – 18.01.2024

SPRING SEMESTER

1st week	04.03.2024 - 08.03.2024
2nd week	11.03.2024 - 15.03.2024
3rd week	19.03.2024 - 22.03.2024
4th week	26.03.2024 - 29.03.2024
5th week	01.04.2024 - 05.04.2024
6th week	08.04.2024 – 12.04.2024
7th week	15.04.2024 – 19.04.2024
8th week	22.04.2024
	Easter holidays (26.04-12.05)
9th week	13.05.2024 – 17.05.2024
10th week	20.05.2024 – 24.05.2024
11th week	27.05.2024 – 31.05.2024
12th week	03.06.2024- 07.06.2024
13th week	10.06.2024- 14.06.2024
14th week	17.06.2024 - 21.06.2024
15th week	24.06.2024 –25.06.2024 (Tuesday)

1.3 Academic principles

The operation of the Department of Informatics and Computer Engineering of the Faculty of Engineering of the UniWA is subject to the written provisions of Law 4957/2022, and Law 4521/2018.

The authorities of The School of Engineering are the General Assembly, the Dean's Office and the Dean.

The authorities of the Department of Informatics and Computer Engineering are the Assembly of the Department, the Board of Directors and the President of the Department (article 81/law 4957/2022).

Dean of the School of Engineering: Konstantinos Stergiou, Professor of the Department of Mechanical Engineering,

Chair of the Department of Information and Computer Engineering: Ioannis Vogiatzis, Professor of the Department of Informatics and Computer Engineering,

Vice President of the Engineering Department: Paris Mastorokostas. Professor of the Department of Informatics and Computer Engineering.

The Department is administratively supported by the Department Secretariat, which is headed by the Head Ms. Ioanna Zara, who is responsible for the coordination and smooth operation of the Department's administrative activities.

1.4 Administrative bodies of Inter-Institutional Double Degree MSc Program

Competent bodies for the organization and operation of the MSc program in Cybersecurity (Article 91 of Law 4957/2022) are:

- *the Senate of the University,*
- *the Graduate Studies Committee,*
- *the Coordinating Committee (C.C.) of the MSc program*
- *the Director of the MSc program.*

1.5 The Department of Informatics and Computer Engineering

The Department of Informatics and Computer Engineering was established in 2018. The five-year Undergraduate Studies Program of the Department of Informatics and Computer Engineering of the University of West Attica was approved by the Ministry of National Education and Religious Affairs in June 2019 (Ministerial Decision 93899/Z1 Governmental Gazette B'/ 2323/13-06-2019). It is a modern program, which is fully harmonized with the corresponding Academic Programs of Greek Polytechnic Schools, as well as with corresponding Departments of the European and international university departments with duration of ten (10) semesters.

The five-year study program utilized to a great extent both the Department's first four-year program, as well as the Department's "Informatics and Computer Science and Technology" Master's Program, given that these are modern, valid, compatible with the recommendations of reputable international organizations and fully cover the range of specializations and deepening of the science of Informatics, Computers and Communications. The matching process of the Department of Informatics and Computer Engineering with the Polytechnic Schools, provided by article 66 of Law 4610, was successfully completed in summer 2024.

1.6 Structure of ICE Department

The Department is structured in three Sectors with respective Directors, which for the Academic Year 2023-2024 are the following:

Department of Software and Information Systems – Director:

Associate Professor Phoivos-Apostolos Mylonas

Department of Hardware and Computing Systems – Director:

Professor Panagiotis Giannakopoulos

Department of Communication Networks and Distributed Systems – Director:

Professor Vassilios Mamalis

1.7 Mission of the Department of Informatics and Computer Engineering and the MSc program in Cybersecurity

The Undergraduate Study Program of the Department of Informatics and Computer Engineering (ICE) covers the entire scope of Information Science, Computers, Communications and their applications (Computer Science, Informatics and Computer Engineering). In addition to the comprehensiveness of the Undergraduate Study Program, special emphasis is placed on both the timeliness of the education provided, which is achieved with a constant emphasis on the basic and fundamental issues of individual cognitive fields, as

well as on specialization in modern topics and cutting-edge technologies resulting from the rapid development of cognitive object.

In particular, the Undergraduate Study Program of the Department

- provides fundamental core knowledge and skills related to the entire spectrum of the knowledge subject of Information and Computer Engineering
- through the streams of specialization that it introduces from the 7th semester of studies, it provides specialization and deepening in knowledge subjects, which respond both to the needs of the national economy and to the modern developments of the science of Informatics, Computers and Communications
- meets international study standards and the needs of students interested in the streams of (a) Software and Information Systems, (b) Hardware and Computing Systems and (c) Computer Networks and Communications,
- specializes the subject matter of the IT and Computer Engineering profession, so that it meets the needs of the labor market and Greek society. In addition, beyond the scientific and technological background, the Undergraduate Study Program is designed to broaden students' horizons in matters of general education and socio-economic content.

With the Ministerial Decision 168262/Z1 (Government Gazette B'/5524/17-12-2020) the five-year Undergraduate Studies Program leads to the awarding of a single and indivisible master's degree, level 7 of the National and European Qualifications Framework, as well:

- A. Possesses the required structural characteristics (ten compulsory academic semesters) to obtain an Engineering Diploma,
- B. Includes courses that ensure: a) the foundation in the basic sciences and arts b) the development of the core courses of the specialty in the entire scope of the knowledge subject of the specialty of Information Technology and Computers c) the deepening and consolidation at a high level of knowledge in the entire scope of the subject ,
- C. Provides the preparation of a diploma thesis lasting one (1) academic semester. The Thesis meets the requirements of a Master's Thesis (supervisor, three-member examination committee, distinct subject of specialization, 30 ECTS credits). The total ECTS Credit Units awarded of the Undergraduate Study Program amounts to three hundred (300) units, of which thirty (30) correspond to the Diploma Thesis,
- D. There is a distinct reference to the courses of the program that correspond to level 7 of the National and European Qualifications Framework. These courses are defined in terms of the semester(s) offered, the specialty and the learning outcomes (level 7) they provide as well as the teaching staff of the corresponding subject who supports them.

The preparation of the five-year Undergraduate Study Program considered the directives of A.D.I.P. (now H.A.H.E.) and was based on the standard curricula proposed by the international organizations Association for Computing Machinery (ACM) and IEEE Computer Society (CS), and the specifications of corresponding Greek and international five-year study programs. Also, the opinion of scientific and professional bodies such as the Technical Chamber of Greece, the Federation of ICT Enterprises of Greece ([SEPE](#)) and the Greek Computer Society (EPY) was taken into account.

The mission of the MSc program for those who choose to specialize in Cybersecurity is:

The creation of an educational environment for high-quality education of students in all study cycles and the "production" of highly qualified and trained scientists and executives in

the field of Cybersecurity,

Understanding Cyber Security Threats: They must develop a deep understanding of the various threats that exist in cyberspace, such as cybercrime, hackers, and malware.

Development of Technical Skills: They will become familiar with cybersecurity techniques such as penetration testing, attack detection, network security, and malware analysis.

Risk management: They will learn how to identify, analyze and manage cybersecurity risks in various environments.

Contact and Cooperation: They will develop communication and collaboration skills, as cyber security requires collaboration between different professionals.

Legal and Ethical Aspects: Understanding the legal and ethical aspects of cybersecurity is important, as professionals in the field must consider legal rules and ethical values when implementing security solutions.

1.8 Interinstitutional Double Degree Graduate Program

The Department of Informatics and Computer Engineering of UniWA organizes and independently operates the Inter-Institutional Double degree Graduate Program (MSc program) in "Cybersecurity", which concludes with the awarding of the Post-Graduate Diploma with the title "Cybersecurity" and the English title Master of Science (MSc.) in Cybersecurity":

For the awarding of the Diploma successful study is required, which requires the attendance of 9 courses awarding 90 ECTS, including the preparation of a diploma thesis, which corresponds to 30 ECTS.

1.8.1 Degree level

According to the National Qualifications Framework, the degree awarded belongs to Level 7.

1.8.2 Access to further studies

With the acquisition of the MSc degree, those students who wish, can continue to the 8th level of studies (doctoral studies).

1.8.3 Approval of the Double Degree MSc Program in Cybersecurity

The following information are the conditions that were applied during the admission of students of the MSc program during the Academic years 2019-2021, 2020-2022, 2021-2023 and 2022-2024 (Article 60/law 4610 /2019, Governmental Gazette 70 A').

The initial decision for the establishment of the MSc program was published in the Governmental Gazette N.1038, vol. B 28-3-2019. With the Governmental Gazette N.4462, vol. B, 09-10-2020 of the modification of decision of the University's Steering Committee No. 12813/18-3-2019 (B' 1038) was posted.

The Graduate Studies Regulation was approved by the Senate of the University (Decision of the Senate of the University of West Attica and published in the Governmental Gazette N.3150, volume B' / 08.08.2019.

The proposal for the Re-establishment of the MSc program, and the Feasibility-Sustainability Study were drawn up by the members of the Coordinating Committee (C.C.) of the MSc

program. The re-establishment MSc program was approved by the General Assembly of the Department of Informatics and Computer Engineering. After the approval from the General Assembly the MSc program was approved by the Graduate Studies Committee and the Senate of the University.

The Department has the necessary building and logistical infrastructure and the necessary teaching and other personnel for the implementation of the MSc program In Cybersecurity.

The participation of Research Teaching Staff of the Department as well as prominent Professors in specific domains taught in the program ensure validity and interdisciplinarity.

1.8.4 Duration of Operation Double Degree MSc Program

The duration of operation of the Msc program is set at five (5) Academic years, i.e. until the academic year 2029-2030, as long as it meets the criteria of the internal and external evaluation, according to article 87 of Law 4957/2022 (with the possibility of renewing its operation in accordance with the terms of the current legislation).

1.8.5 Object of the Double Degree MSc Program

The subject of the "Cybersecurity" Master's Degree is postgraduate teaching and research in cyber security, which today affects many areas of IT and the economy. Its influence is broad and extends to many levels. Some of the key areas affected by cyber security today include:

Economy and Business: Businesses and economies science and Cybersecurity policies with an emphasis on the interdisciplinary approach and orientation to teaching and research excellence.

State insurance: Governments and states depend on cyber-secure systems to protect national infrastructure, information and national security. Cybercriminals can pose a threat to internal and external security.

Protection of Individual Privacy: Citizens use electronic media for their daily activities, and the need to protect their personal privacy and security is essential.

Healthcare System: Digital health systems contain sensitive patient information. Cybersecurity is critical to protecting medical data and preventing cybercriminal attacks in the healthcare sector.

Society and Social Interaction: Cybersecurity affects social interaction through social networks, electronic communications and digital media.

Education and Research: The security of educational institutions and research facilities is important to maintain the integrity of information and protect research data.

1.8.6 Purpose of the Double Degree MSc Program

The purpose of cyber security is to provide protection against threats and attacks related to technology, networks and IT systems. Cybersecurity aims to ensure the confidentiality, integrity and availability of information and systems. It provides means and method to address the following main aspects:

Data Protection: Cybersecurity helps protect the privacy and confidentiality of personal and business data from access, alteration or leakage by unauthorized persons.

Cybercriminal Detection and Prevention: Cybersecurity includes measures to detect, analyze

and prevent cybercriminals and malicious activities.

Enhancing Systems Integrity: Cybersecurity protects against the alteration or aggressive modification of information and systems.

Ensuring Availability: Cybersecurity seeks to ensure that systems are available and operational, even during attacks or disasters.

Strengthening Business Security: Cyber security aims to protect business processes and operations from the negative effects of cyber attacks.

Enhancing Infrastructure Security: Cybersecurity protects critical infrastructure, such as power grids, transportation and other critical services.

1.8.7 Goals of the Double Degree MSc Program

Cybersecurity objectives reflect the efforts made to protect information systems, networks, data and digital assets from threats and attacks. Therefore, the main Knowledge and Research objectives of cybersecurity include:

Confidentiality Protection: The aim is to ensure that confidential information remains secret and tries not to get into unauthorized hands.

Integrity Protection: The integrity of data and systems must be ensured, preventing any alterations or changes that could cause damage or misinformation.

Ensuring Availability: The goal is to ensure that digital resources are available and operational when needed, preventing sudden outages.

Cyber Attack Prevention: Efforts to combat and prevent cyber attacks, including detecting potential threats before they occur.

Enhancing Operational Security: Protecting an organization's critical processes and operations from potential threats.

Training and Awareness: Staff training and awareness on security best practices and cyber threat response.

Response and Recovery: Create response and recovery plans to quickly deal with the impact of attacks.

Compliance with Legal and Regulatory Frameworks: Compliance with legal requirements and regulatory frameworks related to cybersecurity.

These objectives are critical parts of the overall approach to ensuring security and integrity in the digital world.

The Goals at the level of visibility of the MSc program in "Cybersecurity" and the University are the following:

1. Consolidation of the identity of the Double Master's Degrees in the European university system,
2. Ensuring the academic quality in the educational process,
3. Improving the strategic communication of the Msc program,
4. Improvement of information dissemination,
5. Increased awareness,
6. Improving the connection with the graduates of the MSc program,
7. Strengthening the participation of the MSc program in international forums and conferences

1.8.8 Learning Outcomes of the MSc program

Learning results

Upon successful completion of the program:

Learning outcomes in the field of cybersecurity concern the acquisition of knowledge, skills and abilities related to the protection of information systems and data from cyber-attacks and other digital threats. Some important cybersecurity learning outcomes include:

1. **Understanding the Basics Concepts:** Understanding the basic principles and concepts related to cyber security, such as threat identification, vulnerability protection, attack detection, etc.
2. **Systems Protection Skills:** Developing skills to design, install and maintain secure information systems.
3. **Attack Detection and Response:** Understanding methods of detecting and responding to cyber-attacks, as well as emergency response training.
4. **Risk Management and Compliance:** Developing risk management and compliance capabilities cybersecurity practices and standards.
5. **Staff Training:** Staff training on cybersecurity, including threat sensitivity and security best practices.
6. **Development of Technical Skills:** Acquire technical skills related to the use of secure technologies, cryptography, attack detection and secure network management.
7. **Communication Skills:** Develop skills to communicate and share cybersecurity information between professionals and stakeholders.

Abilities

Cybersecurity professionals develop complex skills to deal with constant threats in the digital space. These professionals take on the role of protecting information systems and data. Some key skills of a cybersecurity specialist include:

- **Risk Analysis:** Ability to identify, assess and understand cybersecurity risks that may affect an information system.
- **Design and Implementation of Secure Infrastructure:** Ability to design, implement and manage secure information infrastructure, including networks and devices.
- **Cryptography and Data Protection:** Expertise in the application of encryption techniques to protect data and communications.
- **Attack and Attack Detection:** Ability to identify and counter attacks, including malware detection and analysis.
- **Cyber Attack Incident Management:** Ability to manage cyber attack incidents, including response, remediation and recovery.
- **Staff Training and Awareness:** Create staff training and awareness programs on cybersecurity practices.
- **Identity and Access Management:** Applying secure practices for identity management and access control to systems.
- **Update on New Trends and Technologies:** Stay up-to-date on new trends, threats and technologies in the field of cybersecurity.

1.8.9 Resources of the MSc program– Revenue Management

Sources of income of the MSc program can be donations, sponsorships, grants and legacies from public or private sector bodies, Legal or Natural persons, research programs, research programs and the tuition fees.

The management of any revenues of the MSc program is done by the Special Research Funds Account (SRFA) of the University.

The distribution of income is as follows:

For the financial management of the program, building infrastructures, public utility expenses, etc. 30% reservations in favor of SRFA (E.L.K.E.) and the University,

For operational costs of the program, fees - compensation of teaching, and administrative staff,

For participation in conferences,

For the program dissemination,

For unforeseen expenses.

The PMS Director is responsible for drawing up the budget and reporting of the Program. It submits the budget to the coordinating committee and, once approved, to SRFA for monitoring the implementation of the budget and issuing the payment orders for the relevant expenses.

1.8.10 Admission to the MSc program

The Msc program is addressed to graduates of Higher Educational Institutions of the country or recognized equivalent Institutions abroad related to IT, mathematics, physics, finance, graduates of the Armed Forces and officers as well as to graduates of Departments of Higher Educational Technological Institutes with a degree related the above mentioned academic subjects, who wish to acquire scientific specialization in the wider knowledge area of the Cybersecurity or other scientific fields and specialties that, on a case-by-case basis, may be judged as relevant by the Coordinating Committee to the MSc program, during the evaluation of the nominations. The selection of students is made in accordance with Law 4957/2022 and the provisions of the Graduate Studies Regulation. Every year, during the Spring Semester, by decision of the Coordinating Committee, a notice is published in the press and posted on the Msc program website for the admission of postgraduate students to the MSc program, the start of which has been scheduled for the next academic year.

The selection process of the candidates takes place after submitting an electronic application and submitting specific supporting documents, as specified in the call. For the selection of the students, criteria which are specified in the Operating Regulations of the MSc program are considered and are scored. The final score of the candidates results from the sum of the individual scores in the evaluation criteria.

Upon completion of the evaluation procedures, the Nomination Evaluation Committee prepares an evaluation table of the successful candidates and runners-up, in ranking order, according to the selection criteria and the weighting factors per criterion, and submits it for approval to the Coordinating Committee (C.C.). Candidates who received a ranking position in the ranking order down to the Lower limit of students' admission are considered successful. The Candidate Evaluation Committee (CEC) can also consider successful the candidates who ranked equal to the last successful candidate. In the event of a tie, between the candidate of the last announced admission position and the next one/s, then all candidates with equal grades are admitted to the MSc program Runners-up are the candidates who received a ranking position

in the ranking order, beyond the lower limit of student admission, having the right to register in case that the first in the ranking order do not accept the position or do not register by the deadline.

The successful and/or runners-up are informed by the MSc program Secretariat to register with the MSc program within a deadline, determined by the C.C.. Admitted postgraduate students can be informed about their registration and deadlines from the website of the Department of Information and Computer Engineering (<http://ice.uniwa.gr>) or from the Secretariat of the MSc program (<http://cscyb.uniwa.gr>). Those of them who do not register on time, lose the right to register with the MSc program, unless they cite reasons of force majeure or serious illness, providing the relevant supporting documents. In this case, C.C. assesses the reasons put forward by the candidates and decides accordingly.

In case of non-registration of one or more students, the runners-up, if any, will be invited, based on their ranking order in the approved assessment table, to register to the Program. The replenishment procedure can be applied as many times as necessary, in order to complete the required number of candidates in accordance with the regulation of this MSc program.

The replacement does not concern any candidate selected in the context of "equal rank". The replenishment procedure can also be applied in case of refusal of more candidates. In any case, the replacement of a position is allowed up to one day before the start of the MSc program courses. Any subsequent replacement can only be accepted after the approval of the Program Coordinating Committee.

1.9 Number of applicants

The number of admissions in the MSc program cannot be lower than fifteen (15) and higher than forty (40) in total, per year, not including equivalent degrees, in case they exist.

1.10 Registration at MSc program

Student status is obtained by registering the student at the MSc program. The student's registration in the program and attendance is mandatory for all students.

At the beginning of the Academic semester, before the start of the courses, the registration dates of the students are determined and announced. Registration must be done before the registration deadline. Violation of the registration deadline is equivalent to losing the possibility to attend the current Academic Year.

Only students who are coming under the ERASMUS + International Credit mobility programs validated by their home institutions are accepted with no fee to the MSc program.

1.11 Recognition of Courses

According to article 54, par. 1-3 of the Internal Regulation of Operation of the University of West Attica (Government Gazette 4621 vol. B/ 21.10.2020), students may recognize courses of the study program of the relevant Department, with a grade and credits (ECTS) corresponding to the Department's curriculum, in which they have been successfully examined in a similar Master's Program at home or abroad as long as their content coincides with the course content at a percentage greater than 80%.

The recognition of courses in the cases of the above paragraph is carried out by decision of the

Coordinating Committee, after the submission of a relevant application and acceptance of the content of the course by the lecturer as equivalent to that taught by him course in the MSc program.

Students who have been mobilised to study at Partner Institutions abroad within the framework of the ERASMUS+ program, may recognize all courses from the Host University, which they have registered and in which they have been successfully examined, as long as their content coincides with the course content of their department of study. This also applies to incoming foreign students from Moldova or Kazakhstan.

1.12 Duration of studies

The MSc program starts during the winter semester of each academic year. The minimum duration of study leading to the award of the Post-Graduate Diploma is defined in three (3) academic semesters, which also includes the time for preparing the diploma thesis.

The maximum time allowed to complete the studies is set to six (6) academic semesters.

In case of exceeding the maximum study time limit, the Director of the MSc program informs the CC, which can decide the deletion of the student from the MSc program.

1.13 Suspension of studies

The Coordinating Committee may approve the justified suspension of a master's student's from his studies after his application and recommendation of the Coordinating Committee of the MSc program. Those master's students who have received an educational permit for their studies from their Employer in the MSc program are not entitled to suspension of studies during the same period. The semesters of suspension of student status are not counted towards the prescribed maximum duration of regular studies and the temporary suspension of studies cannot exceed two consecutive semesters. During the suspension of studies, the student status is revoked and all the relevant rights of the student are suspended. Student status is automatically regained after the end of the suspension. After the suspension is lifted, the graduate student will continue from the point of studies, at which the suspension began.

A student who repeats his/her studies is obliged to attend the courses, seminars, etc., in which he/she was not successfully evaluated before the suspension of his/her studies. The postgraduate student who receives a leave of absence, when he/she resumes his/her studies, is still subject to the study status of the time of his/her registration as a postgraduate student.

1.14 Extension of studies

In special cases, the Assembly of the Department of Informatics and Computer Engineering may approve an extension of study at MSc program for up to two (2) additional academic semesters, for the preparation of the thesis, provided that the postgraduate student has submitted a written request to the Department Assembly (at least two months before the end of the 3rd semester), in which the reasons for requesting the extension will be stated.

1.15 Arrangements for academic guidance

1.15.1 Secretariat

The Secretariat of the Department of Informatics and Computer Engineering is responsible for the administrative support, organization and operation of postgraduate studies, as well as for the processing of registration, examinations, grades, certificates and awarding of postgraduate degrees to the students of the faculty.

The Secretariat is located on the ground floor of building 16 (K16) and accepts students, serves by phone and electronically, daily 10.00am – 2.00pm (☎: 2105385577, ✉: pyian@uniwa.gr & ice@uniwa.gr). Announcements related to the implementation of the program are posted on the electronic education platform, which is accessible to students, through the Departments website <http://cscyb.uniwa.gr>.

1.15.2 Study advisors

In addition, after a proposal by the director of the MSc program to the MSc program coordination committee, a study advisor is appointed from all the teachers in the postgraduate program. The list of study advisors is announced before the start of the academic year.

The study advisor monitors the student's progress, provides him with specific information about the program and the correlation of the studies in the Department of Information and Computer Engineering with his scientific background and professional prospects, discusses with the student his future plans for the professional and scientific his advancement, advises him on improving his work in relation to the requirements of his studies, on the use of the Department's resources and infrastructure, and, in general, on organizational or administrative issues and may suggest issues that concern him to the director studies. The study advisor does not necessarily undertake the supervision of the student's thesis. Students are strongly encouraged to communicate regularly with their advisors.

1.15.3 Website of the MSc program

The MSc program has a website in Greek and English: <https://cscyb.uniwa.gr>. The official website is constantly updated and provides all the information about the MSc program. It is the official information site for the postgraduate students. The Academic Calendar is posted on the website.

2. The Study Program

2.1 General principle

The Master's Program in Cybersecurity is part of the educational and research strategic planning of the Department of Informatics and Computer Engineering that aims to meet the modern needs of the country.

The MSc program refers to relevant specialties and aims to further promote scientific knowledge and promote research considering primarily the needs of the global market in matters of internet security, privacy, etc.

For the further promotion and strengthening of the MSc program, the Department can collaborate with recognized national or foreign research institutions, which have sufficient scientific staff and have the necessary logistical infrastructure.

2.2 Organization - Operation of the MSc program

Law 4957/2022 on Postgraduate Studies (Government Gazette 4957 vol. IX/2022) applies to the organization and general operation of the MSc program, as amended. The administrative bodies of MSc program are the following:

The Coordinating Committee (C.C.) of the MSc program consists of faculty members of the Department of Information and Computer Engineering who have undertaken a postgraduate project and are responsible for the coordination and supervision of the MSc program as well as for any matter of an administrative or organizational nature, related to postgraduate studies. The committee is formed after the approval of the C.C., with a two-year term. The members of the Coordinating Committee for the Academic period 2023-2025 are:

- Giannakopoulos Panagiotis, Professor, Director of the MSc program
- Vogiatzis Ioannis, Professor, Deputy Director of the MSc program
- Cleo Sgouropoulou, Professor

The remaining members are some of the Collaborating Institutions, Currently the external members of the CC are:

- Valeriu Ungureanu (USM)
- Corina Negara (USARB)
- Rodica Bulai (UTM)
- Aureliu Zgureanu (ASEM)

The Director of MSc program is a member of C.C. and is appointed together with his Deputy, by decision of the C.C for a two-year term. He presides the C.C, is Full or Associate Professor, is of the same or related academic field as the academic subject of the MSc program, and exercises the duties defined in the law and in the Postgraduate Studies Regulation. He is responsible for organizing, operating and promoting the effective implementation of the program. In particular, the Director convenes and presides over the coordination committee, recommends to the C.C any matter concerning the effective operation of the MSc program, coordinates the teaching staff and implements the decisions of the collective bodies.

2.3 Lecturers

At least sixty percent (60%) of the tutors of the MSc program come from faculty staff or retired members, of the relevant Department or lecturers according to the presidential Decree 407/1980 (A' 112) or article 19 of law 1404/1983 (A' 173) or par. 7 of article 29 of law 4009/2011. All lecturers must hold a doctoral degree, unless their subject is of exceptional and indisputable specificity for which it is not possible or usual to prepare a doctoral thesis.

The members of the Laboratory Teaching Staff carry out laboratory applied teaching work at the University, which mainly consists of conducting laboratory exercises, as well as conducting practical exercises in the fields of application of the relevant sciences. Holders of a doctoral degree or members of the final level may be assigned as lectures, to small groups of students under the supervision of the professors of the faculty and may participate in the supervision of Diploma Theses, as members of three-member committees, as well as in the supervision other tasks.

The C.C. evaluates the needs of the MSc program in teaching staff and, if the existing members are not sufficient, with a reasoned decision it decides the assignment of lecturing to Staff members of other Departments of the same Higher Education Institution or invite Academic Staff members of other Higher Education Institutions, or researchers from research centers of article 13A of Law 4310/2014 (A' 258), including the directors of Cybersecurity departments of the Armed Forces or organizations and companies involved in the Cybersecurity field in accordance with the above provisions for specific courses.

By decision of the C.C., which is taken after a proposal by the Director of the MSc program, renowned scientists who have a position or qualifications as a professor or researcher in a research center, scientists are invited from the country or abroad, as visitors of recognized prestige with specialized knowledge or relevant experience in the field of the MSc program, to meet his educational needs. The invitation of a visitor from abroad is carried out only if he is assigned to teach, with the procedure and what is specifically defined in the Postgraduate Studies Regulation, as applicable for the assignment of teaching to staff members. of the University. The assignment is carried out on the recommendation of the C.C., in accordance with the current legislation.

The C.C., after a proposal, approves for each course as scientific supervisors of the courses, members from the Academic Staff members of the Department or with a justified decision from other Departments or other Universities or external tutors who meet the criteria of the law. The course leader is responsible for organizing the content of the course lectures, organizing, updating and providing educational materials, including material available on online platforms, supervising/guiding graduate students' work within the course and evaluating of the students. He is also responsible for filing with the C.C. proposal regarding the list of course lectures and teachers.

The teaching of all or part of a course in the above categories is done by decision of the C.C., after a recommendation, in accordance with what is provided by law.

The content, goals and orientation of the MSc program (extroversion, interdisciplinary, emphasis on excellence), but also the goal of connecting the MSc program with the needs of the market, require the competent participation of teachers from outside the relevant Department or invited visitors (Article 83 of Law 4957/2022) of recognized scientific and professional experience. The person in charge of the course may propose specific thematic

sections of his course that are required to be covered by experts with a recognized authority in their field, who must hold a doctorate, unless their subject matter is of exceptional and indisputable specificity for which no it is possible or usual to prepare a doctoral thesis in accordance with the current legislation, in order to carry out a call for expressions of interest. The call for expressions of interest is announced on the Department's website and the MSc program website.

2.4 Program Structure and Operation

2.4.1 Courses start

Courses start in the winter semester of each Academic year. The exact date is determined each time by the Coordinating Committee and announced by it. Each semester includes thirteen (13) full teaching weeks.

2.4.2 Academic Calendar of the Program

At the beginning of each Academic Year, the annual Academic Calendar of the Program is uploaded on the MSc program website, which has been edited by the Director of the MSc program and has been approved from C.C. and includes the start and end dates of teaching periods, exam periods, holidays, etc. The Academic Calendar of the Master's Program is harmonized as far as possible with the Academic Calendar of the undergraduate study programs of the Institution. The timetable of courses/exercises, the examination schedule and the final date for the submission of assignments each semester are determined in the MSc program Study Guide, which is drawn up and announced by the before the start of the Academic Year.

2.4.3 Program Structure - Credit Units (ECTS)

The courses and research employment are distributed over three (3) academic semesters. Semesters include 13 weeks of teaching and course exams and are defined as follows: Winter semester: October – February

Spring semester: March – July

The Program provides the possibility for part-time Postgraduate Studies.

The teaching of courses by means of distance education may be carried out, based on article 88, par.1, of Law 4957/2022. The Department has the appropriate technical infrastructures for modern and asynchronous distance learning, to meet educational needs.

In this way of teaching:

- The accessibility to follow the specific knowledge object offered by the MSc program is increased through the provision of equal opportunities to participate in the educational process to a large number of interested parties, throughout the territory, and working students and/or students from the region and/or abroad to have access to the educational material, without requiring their continuous physical presence.
- Distinguished scientists in the field of Engineering from Universities and Research Centers in the region or abroad who do not have the possibility of live presence are given the

opportunity to teach. In this way, the level of teaching, knowledge and experience gained by the students is improved.

- Continuous support is offered to the students throughout the duration of attendance in addition to face-to-face meetings with the lecturers.
- Direct connection of students with external sources of knowledge and increased possibilities of collaboration with instructors and geographically dispersed trainees is provided. The program is based on the European Credit Transfer and Accumulation System (ECTS). The courses are described with the relevant ECTS credit units in all independent educational elements and the activities they may include, and therefore it is possible to transfer and accumulate successful performance in corresponding postgraduate study programs of other Higher Education Institutions, at national and European level.

The total of Credit Units (ECTS) that a student amounts is ninety (90), thirty units (30) per academic semester. The thirty (30) credits of each academic semester of full-time study or writing of the DipT are valued at 750 hours of workload that each student is required to complete.

All program courses are compulsory, and include a total of 39 hours of teaching (introductions, exercises, workshops, case studies) and each course carries from three (3) to eight (8) credits. Courses are taught in the afternoon on working days, according to the timetable. In addition, lectures on current Engineering topics are held as part of seminars, in which invited speakers from Greece and abroad will teach.

Lectures, which are planned and do not take place for any reason, are postponed by the teacher and held on a different date, remotely. Replacement of courses by the teachers must be done after consultation with the secretariat and the C.C. of the MSc program.

In order to improve the curriculum, the detailed outlines of the courses and the expertise offered to the postgraduate students, the following are required: a) constant updating of academic managers and postgraduate students with on-site visits to companies, organizations, and b) the transfer of modern and innovative knowledge through the invitation of highly prestigious scientists and professionals from domestic or abroad. The invitation, travel expenses and accommodation expenses of the Director, the teachers and the invited speakers are borne by the special budget code of the MSc Program, after a proposal by its Director and a decision of the Coordinating Committee, according to the current legislation.

In addition to the theoretical and/or laboratory training, the "Cybersecurity" program emphasizes in conducting research for the preparation of students, who wish to continue in the 3rd cycle of studies.

During the third semester, the master's thesis is prepared, and corresponds to thirty (30) ECTS credits.

All courses are compulsory. Specifically, the program has the following structure:

First semester: Four courses.

Second semester: At least four courses if optional courses are not activated.

Third semester: Elaboration of a Master's Thesis.

The regular revision of the curriculum of the MSc program takes place every two years. In this case the C.C. appoints a Study Program Review Committee, which recommends the revision of the program for final approval.

With the proposal of the SE and the approval of the Senate, the courses in the Program can be

redistributed, the program and the content of the courses can be modified.

2.5 MSc Study Program

The physiognomy of the MSc program is formed based on the general specifications of the corresponding programs of Greek and foreign Higher Education Institutions and the pursuit of its content and orientation meets the modern requirements of IT Engineering.

Courses are taught in English and Greek. Lectures by guest speakers from abroad or specific thematic modules are offered only in English.

Teaching methods include, among others: lectures, practical exercises, workshops, field studies, simulations, participation in groups, project work, practical applications, seminars or tutorials (where necessary).

The full syllabus of each course is uploaded on the website and on e-class at the beginning of each semester, necessarily supplemented with the evaluation method and bibliography.

The Detailed Study Program includes:

The course titles, their content and their teaching hours, which include the teaching work carried out in each form, the learning outcomes, as reflected in the individual course outlines and the educational/research activities included in them, the credit units for each course and the credit units for the awarding of a degree the way and time of course evaluation.

The courses are structured in the following teaching program, per semester, as follows:

First semester

FIRST SEMESTER OF STUDIES			
LESSON CODE	COURSE TITLE	M: Mandatory O: Optional	ECTS
Cscyb 101	Information Systems Security	M	8
Cscyb 102	Cybersecurity protocols and standards	M	7
Cscyb 103	Applied Cryptography	M	8
Cscyb 104	Information Security	M	3
Cscyb 105	Blockchain & Distributed Ledger technologies	M	4
	TOTAL CREDITS FOR THE SEMESTER		30

Second semester

SECOND SEMESTER OF STUDIES			
LESSON CODE	COURSE TITLE	M: Mandatory O: Optional	ECTS
Cscyb 201	Hardware Security	M	8
Cscyb 204	Digital Forensics and Penetration Testing	M	8
Cscyb 205	Software and Database Security	M	7
Cscyb 206	Network security	M	7
Cscyb 202	IoT security and Cloud security	MO	3

Cscyb 203	Mobile computing Security	MO	4
Cscyb 207	Physical Layer Security	MO	3
Cscyb 208	IT project management	MO	4
Cscyb 209	Security of Electronic Transactions	MO	3
	TOTAL CREDITS FOR THE SEMESTER		30

Third semester

THIRD SEMESTER OF STUDIES			
LESSON CODE	COURSE TITLE	M: Mandatory O: Optional	ECTS
Cscyb 300	Diploma thesis	M	30
	TOTAL CREDITS FOR THE SEMESTER		30

The number, type and content of the courses of the study program may be adjusted every 3 years, after a recommendation from the C.C.. of the MSc program and approval of the General Assembly of the Department, depending on the needs of updating the program and international scientific developments.

Some thematic fields and their main content are mentioned:

Network Security:

Focuses on computer network security, including topics such as firewalls, intrusion detection systems, and VPNs.

Cryptography:

It covers the principles and techniques of encrypting and decrypting information to ensure secure communication.

Incident Management and Forensics:

It teaches how to detect, respond to and investigate security incidents, including digital forensics techniques.

Ethical Hacking/Penetration Testing:

It involves learning how to find vulnerabilities in systems and networks through ethical hacking methods.

Security policies and risk management:

It examines the development and implementation of security policies and risk management strategies in organizations.

Secure Software Development:

It focuses on integrating security measures into the software development lifecycle to create secure applications.

Cloud Security:

Addresses security challenges and best practices in cloud computing environments.

IoT Security:

It examines security issues related to Internet of Things (IoT) devices and networks.

Mobile Phone Security:

Covers security issues for mobile devices and apps.

Machine learning for cyber security:

It presents the application of machine learning techniques in detecting and countering cyber threats.

Blockchain security:

It examines aspects of security related to blockchain technology and cryptocurrencies.

Intergovernmental Cyber Governance and Compliance:

It focuses on the legal and regulatory aspects of cybersecurity, as well as compliance frameworks.

Advanced Threat Intelligence:

Explores advanced methods of gathering, analyzing and applying threat intelligence.

Safety awareness and training:

Addresses the human factor in cyber security, emphasizing the importance of educating users to recognize and respond to security threats.

2.6 Examinations and Evaluation of Postgraduate Students

The evaluation and grading in each course is the exclusive responsibility of the academic supervisor of the course, it is done in complete independence from the other courses and is a derivative of the objective assessment of the student's performance in the specific course. The evaluation criteria are clearly defined, announced at the beginning of the academic semester by the academic supervisor/coordinator of the course and written on the outline of each course posted on the website of the MSc program. The possibility is provided for an oral examination for special reasons (e.g. learning difficulties, health reasons, etc.) after a reasoned request of the student and a decision of the C.C.

a) There are two examination periods for all courses, as specified each time in the Academic calendar of the MSc program

- winter semester courses: January/February & September
- spring semester courses: June/July & September.

All written examinations shall normally take place at the University premises, unless extraordinary circumstances require distance examination. Distance examinations are conducted in accordance with the instructions and rules of the University in a way that ensures the integrity of the process and the protection of the students' personal data and after a declaration of acceptance of the terms of the exam by the students.

b) The final grade of each course from the overall assessment of student performance in specified areas (e.g. assignments, exams) in accordance with the instructions provided by each tutor at the beginning of the semester. The minimum passing grade for a course is a grade of five (5) (on a scale of 0-10).

c) For the essays and papers prepared in the context of the MSc program courses, what is stated regarding any kind of plagiarism, in accordance with the existing legislation, is fully applicable. In order to protect copyrights, special software is used in the context of the MSc program to check all kinds of work (Turnitin), in order to avoid incidents of plagiarism. The acceptable percentage is up to 20%.

d) After the announcement of the results and within five (5) days, the student can request the presentation of his written work on the day and time specified by the person in charge of the course. The student has the right to submit a regrading request to the Director of Studies of the

MSc program within ten (10) days from the date the course grade is posted in the student log. The final grading is submitted for approval to the Director of MSc program and is posted by the person in charge in the electronic course management system. The student who wishes to set a minimum grade in a specific course(s) has the right to declare a "clause", stating and signing the minimum grade he wishes on his script. In case of failure, he/she is reexamined in the next examination period. After the expiration of the above deadlines, the course managers upload the final grades on the electronic course management system.

e) In case of failure of a postgraduate student in one or more courses of the MSc program (grade below five), the possibility of re-examination is provided in September. If the postgraduate student fails again in the examination of a course or courses, he is examined, following his application, which is submitted within five (5) days after the announcement of the results of the course of the September examination period, by a three-member committee of the Msc program tutors. The members of the committee should have a related to the examined course research interest, and are appointed by the C.C.. The course tutor is excluded from the committee. The committee is responsible for deciding the student's review process. The examination by the committee will take place within three (3) months of the announcement of the results of the September examination period.

f) A student absent from any examination through sickness or other cause, judged by the instructor to be unavoidable, shall be given an opportunity to take a rescheduled examination or perform work judged by the instructor to be the equivalent.

2.7 Master Thesis

The postgraduate students prepare and write a postgraduate thesis on a topic related to the subject of Cybersecurity. The workload that each postgraduate student is required to pay during the preparation of his/her thesis is valued at seven hundred and fifty (750) hours of work, and corresponds to thirty (30) credits.

The duration of preparation of the master's thesis cannot be less than one semester. Its support takes place after the end of the 3rd semester, as long as the student has been successfully examined in all the courses and has settled all of his financial obligations to the program. In the event that the conditions for the timely presentation of the work are not met, the extension procedure is followed.

1. The program foresees two types of Master's Theses:

- Research Thesis: is an original research paper. Only Diploma theses of this type can receive the maximum grade (10) ten out of ten.

- Systematic review: is an extensive and thorough bibliographic review on a scientific topic of great interest or other important work, but which is not considered an original research work.

The proposed thesis topics are declared in the CC. by the tutord at the beginning of the 3rd semester, and they are posted on the DIPLOMAS page of the website of the Cybersecurity program. The students choose a topic from the posted ones'. Each staff member of the announces up to five (5) proposed topics for diploma theses that belong to his field of study. Students may also propose specific topics that concern their interests within the same deadline. In the event that several postgraduate students choose the same topic, the supervisor of the

specific topic of the thesis has the responsibility to settle the issue in the best way for the students.

2. The C.C. following an application by the candidate, which states the proposed thesis title and the supervisor, and to which a protocol is given, approves the appointment of the supervisor and forms a three-member examination committee. The student's application must have the signature of the proposed supervisor. The students' applications are submitted to the Secretariat at the earliest by the beginning of the 3rd semester of their studies or during the summer period if they have successfully passed all courses. The list with the titles of theses and the corresponding three-member examination committees are posted on the website.

3. **Supervisor of the Master's Thesis - Three-member Examination Committee**

The supervisor of the Master's Thesis is a tutor of the program. The supervisor is also a member of the three-member examination committee. For the appointment of the three-member examination committee, the Coordinating Committee, in its decision, takes into account the relative proposal of the Supervisor for the other two (2) members of the three-member examination committee.

4. The design of each student's Master's Thesis is the responsibility of the Supervisor. During the preparation of a Diploma Thesis, the student is required to deal with the collection and analysis of primary or secondary data.

5. **Writing a Master's Thesis (DipT):** After the collection and processing of the data, the writing of the thesis in Greek or English follows, following a relevant application by the postgraduate student with the consent of the supervisor and approval by the Coordinating Committee. The way of writing the DipT has specific rules, which are described in the Master's Thesis Regulations, which is uploaded on the MSc program website (cscyb.uniwa.gr) website under the subsection "Regulations" .

The thesis must present in a concrete and clear manner the research problem, the nature and significance of the study, the review of the existing literature, the methodology for examining the problem, the research findings, the commentary on the findings and finally recommendations for further investigation of the subject.

6. **Public presentation and examination of the Master's Thesis.** After writing the thesis and checking it against plagiarism through the Institutional Turnitin software and with the approval of the Supervising Professor, the candidate delivers a copy of the thesis to the members of his Three-Member Examining Committee and submits it to the Secretariat of the MSc program. The public support of the thesis is defined by a decision of the MSc program Coordinating Committee, in the last week monthly, within the dates listed in the Calendar of Academic Activities and notified to the Secretariat of the MSc program. The Secretariat publicizes the event by releasing an electronic announcement to the academic community. In the support of the thesis, all three (3) members of the examination committee must be present on the day and time of the support. In the event that an External Members participate in it (members of other Departments of the same or another Higher Education Institution), the possibility of teleconferencing is given for the convenience of External Members (related no. ϕ 122.1/42/23076/b2 /24-2-2011, Ministerial Decision (Government Gazette 433/17-3-2011, section B). The Three-Member Examination Committee meets legally only when all three Members are present (section 5, article 14 of Law 2690/1999). For its approval, the consent of at least two (2) members of the Three-member Examination Committee is required. Then, they

sign it and deliver it to the Secretariat of the MSc program. In case of rejection of the Master's Thesis, it is determined by a new support date, at least three (3) months and up to six (6) months after the first crisis. In the case of a second failure, the student is removed from the MSc program. after a decision of the C.C., following a relevant recommendation of the C.C. of the MSc program.

The evaluation of the postgraduate diploma thesis is based on the decimal scale (with an accuracy of two decimal places) according to the following grading scale:

"Well"	5.00- 6.49
"Very Good"	6.50- 8.49
"Excellent"	8.50- 10.00

The diploma thesis will be evaluated with the grade "Excellent" only if the postgraduate student has submitted an announcement at a pan-Hellenic or international conference with referees or a scientific publication in an international journal, based on his thesis.

7. The MSc program has as its principle the encouragement of research efforts at postgraduate level, which lead either to announcements at recognized national or international conferences or to publications in reputable Greek or international scientific journals and which significantly contribute to the prominence of the research nature of UniWA.

8. After the completion of any corrections proposed by the Committee, and before the student's admission, the student must submit to the Library one (1) copy of the approved Master's Thesis in paper and in electronic form. The written consent of the Supervisor is required for the deposit of the Thesis in the Library.

9. The Graduate Theses of the MSc program are posted on the website of the University Institutional Repository Polynoi.

2.8 Diffusion of Scientific Knowledge

The Director, academic officers, lecturers and, in exceptional cases, postgraduate students can organize scientific events, participate in conferences, workshops and publish in reputable foreign and domestic scientific journals the added scientific knowledge produced. The scientific activities carried out within the framework of the program are published on the website.

2.9 Postgraduate Degree Final Mark

The final grade of the Master's Degree results from the student's grade in the courses, in the Master's Thesis and in all the educational activities provided for in the program, according to the weighting factors of each academic activity. The evaluation is based on the decimal scale (with an accuracy of two decimal places) according to the following rating scale:

"Well"	5.00-6.49
"Very Good"	6.50-8.49
"Excellent"	8.50-10.00

The grade of the Graduate Diploma is calculated to two decimal places and results from 70% of the average of the grades of the first two semesters and 30% from the grade of the thesis which is graded out of ten (10) only if it has led to publication.

The resulting formula is given by the relation:

$$B1=(B1*P1+B2*P2+.....+Bn*Pn)/(P1+P2+.....Pn)$$

D2 = Diploma Thesis Mark

$$\text{Final Grade} = 0.7*B1 + 0.3*D2$$

where B1, B2....Bn are the grades of all the courses that the student successfully took and P1, P2....Pn are the credit units that correspond to each course.

2.10 Rights and Obligations of Postgraduate Students

2.10.1 Monitoring the program

1. Each postgraduate student by enrolling in the Program:
 - accepts the operating rules of the MSc program, as stated in the Regulations and the Study Guide,
 - accepts the obligations determined by the tutor for the didactic and grading management of the course he teaches.
2. Postgraduate students, after completing their registration at the MSc program, receive from NOC their personal institutional e-mail address and the corresponding, strictly personal, code. Every communication of the students with the Secretariat, the teachers and the Director of the MSc program, as well as all educational procedures, should be carried out through their institutional account.
3. Postgraduate students have all the rights and benefits provided for students of the 1st cycle of study, until the end of any granted extension of study, except for the right to receive textbooks for free. The Institution is obliged to ensure that students with disabilities and/or special needs have access to the proposed texts and the teaching material in accordance with the applicable provisions.
4. The participation of postgraduate students in the courses is mandatory and is evaluated at the discretion of the lecturer. In order to certify the attendance of the courses by the students, a printed and/or digital attendance record of the students is kept for all the teaching units of the courses. In the case where the courses are held remotely, a digital student attendance record should be kept for all modules by the tutors. Students' attendances are registered in the electronic course management system of each course within seven (7) days from the implementation of the course. Each student has the right and must be aware of the courses' attendance. The problems that arise regarding the attendance of the courses are dealt with on a case-by-case basis first by the tutor in charge of the course and then by the Director and the C.C. of the MSc program.
5. Postgraduate students are invited to participate and attend seminars of research groups, bibliographic information discussions, visit laboratories and industries that fall under the scope of the program, attend conferences/workshops with a subject related to that of the MSc program, lectures or other scientific events. Postgraduate students must systematically follow the announcements of the MSc program regarding the implementation of the program which is provided on the website of the MSc program. Also, they must be updated daily about the MSc program activities via their institutional email account.
6. Postgraduate students must participate in collective bodies in accordance with the

provisions of the relevant laws.

7. Students must participate in the evaluation of the courses, the teachers and the qualitative and quantitative characteristics of the MSc program.

8. A student who has not completed 75% of the attendance hours of each course does not have the right to participate in the course exams. In case of incomplete attendance in one (1) course, the C.C. of the MSc program can allow re attendance from the beginning or cover of the missed teaching hours with another suitable educational procedure, after a proposal of the scientific supervisor and a relevant decision from the C.C. In case of incomplete attendance in more than one (1) module, the Director of the MSc program recommends to the C.C. that the student re-attends the courses or deletion of the student from the MSc program.

9. Every postgraduate student has the right to request the suspension of attending courses or the experimental part of the diploma thesis for a period of one to two academic Semesters. Suspension of studies is granted by decision of the C.C.. For the approval of the duration of study suspension, the structure of the MSc program is considered. The Suspension time is not calculated in case of exceeding the maximum duration of study. Additionally, in the case of suspension, the graduate student does not pay additional fees.

10. If the student wishes to cut off his studies, he submits a written statement to the Director of the MSc program and with a decision from the C.C. he ceases the status of a postgraduate student. The C.C. may decide to delete postgraduate students if they:

- ✓ exceed the maximum absence limit (25%)
- ✓ have failed the initial and re-examination of a course or courses and have not successfully completed the programme
- ✓ exceed the maximum duration of study at the MSc program, as defined in this Regulation,
- ✓ have violated the written provisions regarding dealing with disciplinary offenses by the competent disciplinary bodies,
- ✓ automatically at the request of postgraduate students,
- ✓ commit an offense that falls under the law on intellectual property (L.2121/93) when writing their prescribed works,
- ✓ do not pay the prescribed tuition fee.

2.11 Ethical Issues

A basic rule of conduct for students is to avoid plagiarism when working on assignments, during their studies, and when writing their master's thesis. Plagiarism is a direct violation of existing copyright laws and its detection entails serious disciplinary sanctions for students who fall for this offense.

It is expressly prohibited: a) the use and reproduction of the intellectual creations of third parties, including the educational materials used in the courses, in part or in their entirety, without the written permission of the creators and their display by the students as their own, during the fulfillment specific obligations, b) the presentation of work that has been prepared collaboratively with other students, as an individual creation, c) the resubmission, in whole or in part, of work that has been prepared to fulfill specific teaching or research requirements in

the past, to fulfill other or new teaching or research requirements, d) any form of copying or collaboration with third parties during any examination process, as well as the use of any kind of aids, notes and electronic media, unless the person in charge of the examination process allows their use.

Postgraduate theses are prepared exclusively by the postgraduate students who have undertaken them, otherwise the student will be warded off the MSc program. In the event that he/she has already received the relevant degree, he is revoked by relevant decisions of the competent bodies.

The text of the Diploma theses must be original. References to the works of other authors must be cited accordingly and the established rules for the use of external sources in the writing of scientific papers must be followed. Any copying of another author's or creator's work is considered a serious academic misconduct, is contrary to the law on intellectual property (see Law 2121/1993) and is subject to the prescribed regulations on legal protection (articles 63A-66D).

Students must respect and protect the facilities and equipment of the University, ensure the safety and cleanliness of its premises and avoid causing or encouraging disturbances or inappropriate behavior that may cause damage to the buildings, facilities and its property.

Students must not use or allow the premises or facilities of the Institution to be used for illegal acts or acts that harm the image or good reputation of the Institution and must not participate in acts inconsistent with the academic mission of the Institution or hinder its orderly functioning (of its institutions and services, teaching and research), academic freedom in research and teaching and the free expression and circulation of ideas.

It is not allowed for students to record or film the lecturers' lectures, except with the written consent of the lecturer and all present students.

2.12 Acknowledgment and Awarding of Diploma

The award ceremony takes place in the premises of the Department or School, in the presence of the Director of the MSc program or/and his Deputy, the President of the Department or/and his Deputy, the Coordinating Committee of the MSc program and, if possible, a representative from the Rectorate.

2.12.1 Graduate Diploma

The MSc program entitled "CYBERSECURITY" leads to the awarding of a Postgraduate Diploma.

The Diploma of Postgraduate Studies (D.P.S.) is a public document. It is signed by the Rector, the President of the Department and the Secretary of the Department and the Director of the program. The graduate may be granted, before the awarding of the Diploma, a certificate of completion of studies stating the date on which the Program was successfully completed. The certificate is provided in English Language.

Postgraduate students must have successfully met all the academic obligations of the Program and have paid off all their financial obligations, as well as any obligations to Student Services and the Institution's Library, in order to receive either the Postgraduate Diploma or the Certificate of Completion of Studies. The names of the diploma holders are approved by the C.C., which verifies the successful completion of the studies in order to award the degree.

2.13 Diploma Appendix

The Postgraduate Diplomas granted by the University of West Attica are accompanied by the prescribed Diploma Supplement, which is an explanatory document that provides information on the nature, level, general education framework, duration and content of the study program, qualifications and the specialization obtained by the graduate and his score according to the European Credit System (ECTS), the educational activities, which were successfully completed, and does not replace the official degree or the detailed course score awarded by the Institutions.

2.14 Internal and External Evaluation Procedure of the MSc program

2.14.1 Internal Evaluation

The goal of the MSc program is to ensure the quality and the continuous upgrading of the educational services provided. In this context, the process of evaluating courses and teachers by postgraduate students is included, article 87 of Law 4957/2022. The evaluation of the courses, the teachers and the qualitative and quantitative characteristics of the MSc program, is carried out in accordance with article 44 of Law 4485/2017 and the regulation of postgraduate studies of the University of West Attica and constitutes an essential obligation of the postgraduate students. A basic tool is the completion by the students of a questionnaire through which they are asked to evaluate the lecturers, the content and organization of the course, the support of the educational process with the appropriate supervisory means and the use of new technologies, the relationship between the lecturers and the students, the way / process of examining and evaluating students, the connection of teaching with the latest research data.

The evaluation criteria of the courses are:

The relevance of the course to the subject of the MSc program,

The adequacy of the teaching material in relation to the requirements of the subject of the course, The adequacy of the educational material (books, notes, digital educational material, etc.),

The adequacy of the infrastructure used for the course (Rooms, Laboratories, Software, etc.),

The process and way of evaluating - grading the students in the course (written exams, assignments, etc.), The effectiveness of the educational process.

The teachers' evaluation criteria are:

- The didactic and scientific competence of the teachers in the subject of the course,
- The ability to transmit knowledge on the part of the teacher,
- The teacher's consistency in his obligations,.

The teaching aids he used during the training (proficiency, effectiveness), the process and the way he assessed the students in the course.

The following procedure is followed for the evaluation of courses and teachers:

At the end of each semester, before the completion of the teaching of the courses, under the responsibility of the Secretariat of the MSc program, electronic evaluation questionnaires are sent for each course and the corresponding teachers through a specially configured platform

and are filled in by the students ANONYMOUSLY.

The evaluation of the courses and teachers of MSc program by the postgraduate students and the publication of the results of the evaluation to those involved are carried out in accordance with the certification and evaluation procedures of the National Authority for Higher Education (H.A.H.E.) and the Quality Assurance Unit (MODIP) of the University of West Attica.

The Director of MSc program and C.C. are competent to proceed, in collaboration with the lecturers, in drawing up a proposal for the improvement of the educational services provided, where necessary, based on the evaluations of the students. At the end of the term of the C.C. under the responsibility of the outgoing Director, a detailed report is prepared of the research and educational work of the MSc program as well as its other activities, with the aim of upgrading the studies, the better utilization of human resources potential, the optimization of existing infrastructure and the socially beneficial use of the available resources of the MSc program. The report is submitted to the relevant Department, to which the MSc program belongs.

During each academic semester, a joint meeting of postgraduate students, teachers and the Coordinating Committee is held for the continuous improvement of the quality of the educational, scientific and research work of the MSc program. The findings of this internal evaluation prescribe and shape the context of a continuous readjustment of the educational work of the teachers, as well as the obligations of the students.

The results of the evaluation are available, through the Director of the MSc program at the MO.D.I.P., for the compilation of the Internal Evaluation Report every two years.

Each teacher, in consultation with the students, can carry out, in the context of his/her course, a separate evaluation process, which, however, only concerns the specific course.

2.14.2 External Evaluation

An External Evaluation of the MSc program is carried out based on the procedures of the MO.D.I.P. of the University of West Attica and H.A.H.E.

3. Students' Information

3.1 Hardware Infrastructure

The MSc program operates at the facilities of the School of Engineering, Department of Informatics and Computer Engineering, of the University of West Attica, in Egaleo Park Campus, on 28 Agiou Spyridonos Street. For the needs of the MSc program, an auditorium and a fully equipped with modern audio-visual equipment classroom is provided. Fully equipped laboratories are available for the uninterrupted conduct of the laboratory courses. The Department currently operates seven statutory research-educational laboratories:

1. Data, Information and Knowledge Management
(Information, Data and Knowledge Management)
2. Intelligent Knowledge, Image and Information Systems
(Advanced Knowledge, Image & Information Systems)
3. Parallel and Distributed Systems and Networks
(Parallel and Distributed Systems and Networks)
4. of Computing and Embedded Systems Technology, IoT and Optimization
(Computing and Embedded Systems, IoT and Optimization)
5. Educational Technology and E-Learning Systems
(Educational Technology and e-Learning Systems)
6. of Online Computing and Cloud Computing Technologies
(Internet and Cloud Computing)
7. Industrial Information Systems
(Industrial Information Systems),

The University Libraries have the necessary specialized staff, as well as the appropriate infrastructure to serve the students. In the online hub of the libraries, all the services offered are listed in detail and it is possible to access the computerized catalogs, the electronic sources, the electronic magazines, etc. The library of the department has a rich collection of Greek and foreign books and magazines covering the field of Engineering. It also maintains a record of students' dissertations. Postgraduate students have the right to use the Institution's Libraries. Also, user training seminars are conducted, mandatory upon students' entry into the MSc program in order to familiarize them with their resources and services. The library is also used by students as a place to study and access the Internet, Monday - Friday 09.00 am - 17.00 pm. For any information about the operation of the Libraries and the services they offer, students should visit their website(<http://www.library.uniwa.gr>) and/or communicate with the staff.

For the needs of the MSc program, fully equipped computer laboratories are available, in which students are given the opportunity to attend seminars to familiarize themselves with the basic computer programs as well as more complex and specialized ones, which contribute to their academic and professional development.

The Campus has a computer network (PC, laptop), printers, audio-visual teaching systems and equipment for the reproduction of forms (photocopies). It also has a portal and wireless internet access (Wi-Fi).

Academic Identity

Graduates of all Universities in the country can submit their application for the issuance of a new academic identity card online.

The new identity has strong features of mechanical strength and security against counterfeiting. In addition, it is designed to be valid for as many years as the student status and to cover multiple uses, in addition to the Student Ticket. The new IDs state the exact period of validity of the right of the Student Ticket. In the event that the student is not entitled to a Student Ticket, the card serves as a simple identity card.

3.2 Provision of Electronic Services

The University of West Attica provides a comprehensive range of online services to the academic community, supporting the educational process, research activity, as well as administrative and support services of the University.

Within the framework of the above philosophy, a series of applications have been developed and are in use, which are accessible to the entire academic community using the same passwords (username & password). For security reasons, passwords are secret and strictly personal for each user.

The Network Operation Center is responsible for the support of all electronic services provided at the University of West Attica. The Network Operation Center provides a range of online voice and data services to members of the university community.

Postgraduate students obtain upon registration an identification code with which they have access to all electronic services provided by the University and the state. The use of the identification code is strictly personal. The University's NOC in collaboration with the Secretariat of the MSc program undertakes the registration of students in the University's user list and then creates an access code, which the students can receive from the Secretariat.

University students have access to various categories of services such as the following: a) basic electronic services such as e-mail, storage of files and data in the computing cloud, b) e-learning services, c) access services to electronic resources and d) use of applications that secures the University for all members of the academic community. Students must comply with the terms of use of electronic services and applications, as stated in the Operating Regulations of the IT and Networks Center and announced on the Institution's website.

3.3 Research programs

The members of the Faculty of the Department of Informatics and Computer Engineering participate in research and educational programs funded by the European Union and other national or international organizations. The students have the possibility - during the preparation of their diploma thesis - to participate in these programs, after consultation with the person in charge of the implementation of the program.

3.4 Student Mobility

ERASMUS+ is the European Commission's program for education, training, youth and sport which aims to strengthen skills and employability, as well as to modernize education, training

and youth systems in all areas of Lifelong Learning (Higher Education, Vocational Education and Training, Adult Education, School Education, youth activities, etc.).

The action of the program ERASMUS+ for the Higher Education sector grants the mobility of students and staff of Higher Education Institutions in countries participating of the programme. The mobility of students and staff abroad is considered particularly important, because the benefits gained by those who move are multiple. Through the mobility, students have the opportunity to develop new skills and qualifications, which contribute to their personal development. Specifically, students are given the opportunity to improve their language skills, develop intercultural skills, develop into citizens of Europe, while in addition students who travel for internships can gain valuable work experience in a company/organization abroad. ERASMUS+ contributes to enhancing skills and employability and supports the modernization of education, training and youth systems.

The University of West Attica ensures its connection with Universities and research centers abroad and ensures mobility for studies for students participating in all three study cycles.

Mobility studies can include:

- Attending courses for an academic semester or for an academic year or
- Carrying out part of their thesis for a quarter or a semester.

The selection process for outgoing students is carried out in accordance with the provisions of the University Regulations.

Hint: To be noted that the student has the possibility to move through the program one year after the end of his studies, as long as he/she submits the relevant application before the completion of his studies.

3.5 Office of Interconnection, Mediation and Innovation

The University of West Attica, loyal to its philosophy regarding the interconnection of the university community with the labor market, has developed and operates the Department of Interconnection, Mediation and Innovation.

The Department of Interconnection, Mediation and Innovation is an organized effort of the University of West Attica to support and expand communication between the Academic community and the labor market. It functions as a connecting link between the research community of the Foundation and the productive and social agencies, in an effort to utilize the research and creative activity of the University's research potential for the benefit of development.

The Department of Interconnection, Mediation and Innovation addresses:

- to all students and graduates of Higher Education, with priority to those of the Foundation.
- to all private and public sector businesses, organizations, local government services, as well as to collective bodies, such as chambers, cooperatives, etc.

Having as its core a modern communication network, the Department of Interconnection, Mediation and Innovation works to achieve the following goals:

- contribution to the training, specialization and professional rehabilitation of the final students and graduates of the University,
- meeting the needs of businesses with specialized staff,

- informing the Foundation about the needs and requirements of production and participating in curriculum adaptation activities,
- cooperation with corresponding offices of Higher Education Institution in Greece and abroad.

Through the Department of International and Public Relations of the University of West Attica, the cooperation of faculty members as well as postgraduate students of the Department with international organizations, such as ENISA, as well as with Engineering Schools and University Institutions in Europe and the United States of America is facilitated.

3.6 Counseling, Career and Guidance Department

The University of West Attica, in order to effectively help and support the professional growth and development of its students and graduates, has developed and offers counseling and career guidance services in matters of study and career by specialized consultants in the field.

Within the framework of the above approach, the Career Counseling and Guidance Department operates at the University of West Attica.

The services offered by the department are the following:

At the advisory level

- provision of employment and career counseling services, through individual sessions, to explore interests and work preferences, career plan, as well as further education/retraining/research opportunities in Greece and abroad,
- provision of employment and career counseling services, through individual and/or group sessions, on topics such as CV writing, selection interview, cover letter writing, personal portfolio preparation and job search techniques,
- organization of events - conferences - exhibitions - seminars with the subject of the program's work, as well as promotion of the department's services, activities and results through publicity actions,
- cooperation with a network of academic advisors for guidance in education and career matters (provided that there will be the necessary collaborations),
- cooperation with a network of mentors,
- participation in third party events,

At the research level

- development and editing of advisory material in printed and electronic form,
- preparing research - studies regarding the professional career of the graduates of the Foundation and the labor market,
- monitoring the career path of students and graduates who used the services, in order to evaluate the work provided by the department.

3.7 Student welfare issues - Accessibility

According to the provisions in force, "Master's students have all the rights and benefits provided for students of the first cycle of study, until the end of any granted extension of study, except for the right to receive free textbooks. The Universities are obliged to ensure that

students with disabilities and/or special educational needs have access to the proposed texts and teaching".

The MSc program foresees more broadly equal access to academic studies for students with different abilities. The University takes care of the installation and maintenance of the necessary infrastructure for the locomotion of special groups of students. The services of the University and the educational staff ensure the support, facilitation and service of students who belong to special groups, in order to ensure their seamless participation in the academic activity and their quality of life in the University premises. Supporting IT technologies and access services contribute to the above.

Postgraduate students who do not have other medical and hospital care are entitled to full medical and hospital care in the National Health System (NHS) with coverage of the relevant costs from the National Health Service Provision Organization.

3.8 Student advocate

The institution of the Student Advocate was established by article 55 of Law 4009/2011 with the purpose of mediating between students and professors or administrative services of the University, in order to deal with maladministration phenomena, and with the aim of observing the legality and safeguarding the orderly operation of the University.

As part of his responsibilities, the Student Advocate investigates cases ex officio or following a report and mediates with the competent bodies for their resolution. It can request from the services of the University any information, document or other evidence on the case, examine persons, perform an autopsy and order an expert opinion. If he finds that the legality is not respected in a specific case, he draws up a conclusion, which he notifies the professor concerned or the competent administrative department and the student who submitted the report, and mediates in any suitable way to resolve the problem. The student's Advocate may, by his act, place on file a report that is deemed clearly vague, unfounded or unsupported, while in the event that he considers that there are indications of a disciplinary offense, he forwards the case to the competent disciplinary body.

The Student Advocate has no authority in matters of exams and students' grades.

3.9 Communication between students and teachers

The contact details for the Academic Leaders of the courses, the Advisors and all other services of the department are provided on the website of each course of the study program.

Students are advised to take advantage of the possibilities of electronic communication using the possibilities of the electronic educational platform, in addition to the scheduled meetings, they can schedule meetings with the lecturers or the Advisors according to their availability schedule. The regular faculty members of the Department of Informatics and Computer Engineering, before the start of each semester, set specific contact hours with the students (at least 2 hours/week).