

Master's Program: «Educational Sciences – Distance Learning Utilizing Advanced Learning Technologies (e- learning) »

Subject, Purpose, Expected learning Outcomes of the Master's Degree Program

The subject of the Master's Degree Program is the specialization and research in the field of Distance Learning (e – learning) and Blended Learning through the pedagogical utilization of advanced learning technologies. It focuses on the human – centered aspect of applications such as artificial intelligence, virtual and augmented reality, digital storytelling, etc.

The Purpose of the Master's Degree Program:

- 1.The specialization and research in the field of Distance Learning and Blended Learning through the pedagogical utilization of advanced learning technologies, while focusing on the human – centered aspect of applications such as artificial intelligence, virtual and augmented reality, and digital storytelling. This ensured that the holders of the awarded Master's Degree have pedagogical competence and advanced specialization in the relevant areas.
- 2.The education and training of scientists- researchers capable of contributing to the promotion of research and innovation in the field of the pedagogical utilization of Distance Learning and Blended Learning, with an emphasis on the human – centered aspect of technology and the encouragement of critical thinking and creativity.
- 3.The further development of Knowledge, research and innovation, while meeting the educational, research, social, cultural and developmental needs of the country, particularly in the fields of education, creativity and the cultural heritage.

Expected Learning Outcomes:

- i) Design and implementation of open collaborative environments for distance learning/ blended learning, both at school level (primary, secondary) and in the field of teacher training/ adult education/ Lifelong learning, as well as higher education through the pedagogical utilization of advanced learning technologies while

focusing on the human – centered aspect of applications such as artificial intelligence, virtual and augmented reality, digital storytelling, etc.

ii) Design and development of digital educational material based on the principles and methodology of distance learning for all education levels, as well as in the field of teacher training/ adult education/ Lifelong learning. Particular emphasis will be placed on the methodology of creating digital material utilizing advanced applications of Artificial Intelligence, Virtual and Augmented Reality, as well as modern forms of digital storytelling (3D animation, etc.).

iii) Design and development of advanced collaborative inquiry and knowledge – building environments, with an emphasis on the experiential learning in authentic contexts of formal and informal learning, focusing on encouraging creativity in the field of connecting education with cultural heritage.

Duration of the studies

The minimum duration of the studies for the award of the title mentioned in article 3 is three (3) academic semesters of full – time study. The maximum duration for obtaining the Master’s Degree (M. Ed) is twice the normal duration of study, that is 6 academic semesters (including the completion and defense of the thesis). An extension of the study period is granted in exceptional cases upon a well – documented request.

The postgraduate student is entitled, with a justified request providing proven serious reasons, to ask for a suspension of their studies from the General Assembly of the Department of Primary Education at the University of Crete.

The general Assembly decides, following a relevant proposal by the Director of the Master’s Program or the supervising professor, whether the student, who is in the process of completing their master’s thesis, will have their application for extension of studies approved or rejected.

The maximum duration of the suspension of studies that may be approved by the General Assembly is two (2) semesters, which is not counted in the student’s total duration of studies.

The suspension can be terminated following a re – enrolment application by the graduate student to the General Assembly.

If the student does not submit a re – enrolment application after the approved suspension period ends, they are automatically dismissed from the Master’s Program.

Courses and Academic Obligations of Postgraduate Students

The attendance at the Master's Program is full – time. There is no option for part – time attendance for the postgraduate students.

The total number of Credit Units (ECTS) required for obtaining the Master's Degree (M. Ed) is ninety (90) and the Master's Degree Program is characterized by full – time attendance. Specifically, the student must: (a) accumulate a total of sixty (60) credit units from the successful assessment of compulsory courses, which have mandatory attendance, during the first two semesters of study, and (b) complete a Master's Thesis, which is credited with thirty (30) credit units.

The semester curriculum is structured as follows:

(A' Semester)	ECTS
A1. Introduction to Distance Learning/ Blended Learning with the Utilization of Advanced Learning Technologies – Pedagogical Framework (e- learning / Blended Learning Pedagogy).	10
A2. School Distance Learning and Creativity with the Utilization of Artificial Intelligence Applications (e – learning – Artificial Intelligence & Creativity).	10
A3. Pedagogical Design of Interactive Educational Material Using the Method of Distance Learning and the Utilization of Artificial Intelligence Applications.	10
Total	30

(B' Semester)	ECTS
B1. Pedagogical Utilization of Gamification Technologies & Extended Reality XR (= Extended Reality: AR, VR, MR) in the Field of Experiential Education and Cultural Heritage.	10
B2. Pedagogical Utilization of 3D Animation in the Field of Distance Learning and Cultural Heritage with the Utilization of Artificial Intelligence Applications.	10
B3. Introduction to Research Methodology & Methodology for Writing Theses	10
Total	30

(C' Semester)	ECTS
Writing a Thesis.	30

1. The language of teaching/ instruction for the Master's Degree Program is specified as Greek and/or English.

2. The academic year includes 13 weeks of classes for each semester. The start and end dates of each semester are announced before the beginning of the academic year. Classes are held on Saturdays and Sundays according to the academic calendar of the Department of Primary Education. Preparatory period: November – December. All course obligations, such as the execution and submission of exercises and assignments, must be fully completed within the duration of each academic semester.

Courses are conducted in the form of lectures, seminars and/ or labs and may include preparatory research and teaching activities. Specifically, in the courses A2, A3, B1 and B2, practical training activities may be scheduled either in primary and secondary education schools or in teacher training and Lifelong Learning structures, or in places and structures of cultural interest. Additionally, courses may be organized into independent thematic modules with a total duration of 39 teaching hours per course. All courses are available on the Online Learning Environment of e – learning Lab at www.edivea.net . Modification of the course program and redistribution between semesters may occur following a proposal by the Program's Coordinating Committee and a decision by the Department's General Assembly.

According to the applicable legislation, the courses of the Master's Degree Program will be conducted based on the 'Blended Learning' system, which means combining of Distance Learning (synchronous or asynchronous) with face to face educational processes as follows:

α). Face to Face Teaching: at least 30% of the total ECTS credits of the Master's Degree Program.

β). Distance Learning: A maximum of 70% of the total ECTS credits of the Master's Degree Program. Synchronous Distance Learning: A maximum of 50% of the total ECTS credits of the Master's Degree Program.

βi). Teaching will be conducted in an advanced teleconferencing environment, where instructors and students interact in different locations but at the same time, with the ability for two – way communication and the sharing of multimodal content (slides, videos, etc.) in real – time.

βii). Asynchronous Distance Learning: A maximum of 20% of the total ECTS credits. Specifically, there is interaction between: instructor and student, student and educational material, students among themselves in a specially designed asynchronous distance learning environment, where instructors and students interact in different locations and at different times.

The correlation of the educational process with the required ECTS credits, according to the applicable legislation, for obtaining the Master's degree is defined as follows:

Courses: Total 60 ECTS:

- a. Face – to – Face teaching (18 ECTS).
- b. Synchronous distance teaching (30 ECTS).
- c. Asynchronous distance teaching (12 ECTS).

According to the applicable legislation, the implementation of Distance Learning will utilize both the integrated e – learning system of the University of Crete and the specialized technology infrastructures for synchronous and asynchronous distance education of the Laboratory for Advanced Learning Technologies in Lifelong and Distance Education (e – learning Lab) of the Department of Primary Education at the University of Crete.