

D3.3 STUDY GUIDE

Joint International Master's Programme

Artificial Intelligence for Digital Learning and Gamification



Academic Year: 2027-2028

Note on the Preparation of this Study Guide

This Study Guide has been prepared to provide students and staff with a clear, practical, and academically coherent presentation of the Joint International Master's Programme **"AI for Digital Learning and Gamification."** It is based on the officially approved founding and regulatory framework of the Programme, together with the relevant institutional and academic documentation of the **University of Ioannina (Uoi)**, **Klaipėda University (KU)**, and the cooperating departments responsible for its implementation. The Guide is intended to accompany students throughout their studies and to reflect the joint, international, and research-oriented identity of the Programme.

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1. Welcome to the Programme

Welcome to the Joint International Master's Programme AI for Digital Learning and Gamification.

It is with great pleasure that we welcome you to the Joint International Master's Programme *AI for Digital Learning and Gamification*. By joining this programme, you become part of a dynamic and internationally oriented academic community established through the collaboration between the Department of Early Childhood Education, School of Education, University of Ioannina (Greece), and the Department of Pedagogy, Klaipėda University (Lithuania).

This programme has been developed to meet the needs of postgraduate students and professionals seeking to deepen their understanding of the transformative role of Artificial Intelligence, digital learning environments, and gamification in contemporary education. In an era characterized by rapid technological advancement and evolving educational practices, the programme aims to provide not only advanced theoretical and applied knowledge but also the critical, pedagogical, ethical, and research competencies required for the effective and responsible integration of Information and Communication Technologies (ICT) in educational contexts.

Throughout your studies, you will engage with emerging theories, innovative methodologies, and interdisciplinary perspectives that explore the complex relationship between education, technology, and society. The curriculum is designed to foster critical reflection, academic inquiry, and evidence-based practice, enabling you to develop the knowledge and skills necessary to address contemporary educational challenges and contribute meaningfully to the advancement of the field.

As a joint degree programme, this MSc reflects the shared commitment of both partner institutions to academic excellence, internationalisation, innovation, and student-centred learning. You will benefit from the expertise of distinguished academics, access to diverse educational resources, and participation in a vibrant international learning environment that promotes collaboration, inclusivity, intellectual engagement, and intercultural exchange.

We are confident that your experience within this programme will be intellectually enriching, professionally valuable, and personally rewarding. We hope that it will encourage you to approach educational innovation with critical insight, ethical responsibility, and scholarly rigour, while empowering you to contribute actively to the future development of digital education and learning technologies.

We warmly welcome you to our academic community and wish you every success in your studies and future professional endeavours.

The Programme Director

2. General Information about the Programme

2.1 Official Title

AI for Digital Learning and Gamification

2.2 Type of Programme

Joint International Master's Programme / Joint Master's Programme of International Cooperation.

2.3 Degree Awarded

Upon successful completion of the Programme, students are awarded a Joint Master's Degree in Educational Sciences, corresponding to Level 7 of the National and European Qualifications Framework.

2.4 Coordinating Institution

University of Ioannina, Department of Early Childhood Education, School of Education. The Department of Early Childhood Education serves as the coordinating Department and bears primary responsibility for administrative coordination.

2.5 Partner Institution

Klaipėda University, Department of Pedagogy. Klaipėda University contributes to the joint academic delivery and provides complementary administrative and technical support, including support for distance learning infrastructure.

2.6 Language of Instruction

The language of instruction is **English**. The Master's Thesis is also written in **English**, with an extended abstract in **Greek** and **Lithuanian**.

2.7 Duration and Credit Load

The programme is offered in **three semesters** of full-time study and corresponds to **90 ECTS credits** in total. Each semester corresponds to **30 ECTS credits**. A part-time study route is also foreseen, extending the studies to six semesters.

2.8 Mode of Delivery

The educational process is organised primarily through **synchronous distance education**, supported by asynchronous activities, supported by appropriate pedagogical design and interactive teaching methods. In addition to remote teaching, **eight hours of in-person synchronous academic work per course** are provided. The programme uses **Microsoft Teams** (MS Teams) for synchronous teaching and learning and the **E-COURSE** platform for asynchronous support; Klaipėda University also supports MS Teams teaching and mentoring through its Virtual Learning Environment.

2.9 Period of Operation

The programme is scheduled to operate from the academic year **2027-2028** until the end of **2031-2032**, with the possibility of extension by decision of the two partner institutions.

3. Partner Institutions

3.1 University of Ioannina, Greece

3.1.1 History of the University of Ioannina

The **University of Ioannina** is one of Greece's established public universities, with a strong role in higher education, research, and regional development. Its institutional development is closely connected with the intellectual and cultural history of Epirus and with the long-standing aspiration to establish a university centre in north-western Greece.

The modern academic development of the University began in the 1960s. In **1964**, a branch of the Faculty of Philosophy of the Aristotle University of Thessaloniki began operating in Ioannina. Additional academic units were gradually created, and in **1970** the University of Ioannina was formally established as an independent Higher Education Institution. The legal act establishing the University is explicitly cited in the Joint International Master's Regulations.

During the decades that followed, the University expanded through the establishment of new schools and departments across a wide range of disciplines. Within this broader development, pedagogical studies also gained a stable institutional basis. The current Study Guide of the Department of Early Childhood Education records that the **Department of Early Childhood Education** began operating in **1987-1988**, while the **School of Education** was established in **1996-1997**.

The historical evolution of the University of Ioannina reflects both academic growth and a wider mission to support social, educational, and cultural advancement in the region and beyond.

3.1.2 Schools and Departments

The University of Ioannina is a comprehensive university comprising a broad range of schools and departments across the sciences, humanities, social sciences, health sciences, engineering, and education. For the purposes of the present Joint International Master's, the most relevant academic structure is the **School of Education**, to which the **Department of Early Childhood Education** belongs. The School of Education also includes the **Department of Primary Education**.

The Joint International Master's Regulations explicitly identify the **Department of Early Childhood Education, School of Education, University of Ioannina** as one of the two academic units jointly organising the programme, and designate it as the **coordinating Department**.

This institutional placement is important because it situates the programme within an established academic environment devoted to teacher education, pedagogical sciences, and educational research.

3.1.3 Academic Authorities

At the institutional level, the University of Ioannina is governed by the **Board of Administration**, the **Senate**, the **Rector**, the **Vice-Rectors**, and the **Executive**

Director. These authorities are identified in the Departmental Study Guide as the principal governing bodies of the University.

At department level, the principal governing bodies of the **Department of Early Childhood Education** are the **President of the Department** and the **Department Assembly**. The Departmental Study Guide explains that the Department Assembly includes academic staff and representatives of the relevant staff and student categories, in accordance with the applicable legal framework.

For the Joint International Master's specifically, governance is embedded in a shared inter-institutional structure. The Regulations define the competent bodies as the **Senates of both universities**, the **Institutional Postgraduate Studies Committee of the University of Ioannina**, the corresponding academic body of Klaipėda University, the **Programme Study Committee**, the **Coordinating Committee**, and the **Director of the Joint Master's Programme**.

3.1.4 Admission Requirements for Undergraduate Studies

In this Student Guide, this subsection is included as general institutional information and should not be confused with the admission rules of the Joint International Master's itself.

The uploaded departmental material confirms that the Department of Early Childhood Education admits undergraduate students within the framework of the Greek higher education system and also includes procedures for **classification admissions** and other regulated forms of entry where applicable. The Study Guide, for example, refers to the annual submission of relevant documents and examination procedures for classification candidates.

The same source also shows that undergraduate study is governed by formal regulations regarding registration, course declarations, progression, examinations, and degree completion.

For the purposes of the present Joint International Master's Study Guide, it is sufficient to note that undergraduate admission to the University of Ioannina and to the Department of Early Childhood Education is governed by the applicable national and institutional framework in force at the time of admission, while admission to the Joint International Master's is governed separately by the programme's own Regulations.

3.1.5 Language Policy of the University of Ioannina

The University of Ioannina operates primarily within the Greek higher education system, where **Greek** is the principal language of academic administration and of most undergraduate study programmes. At the same time, the University supports internationalisation, student mobility, and the development of foreign-language and international academic activities.

Within the Department of Early Childhood Education, the current Study Guide includes structured provision for **foreign language study**, specifically in **English, French, and German**, with academic language courses forming part of the curriculum.

For the Joint International Master's, however, the governing rule is the one explicitly stated in the Joint International Master's Regulations: the **language of instruction is English**, and the **Master's Thesis is written in English**, with an extended abstract in

Greek and Lithuanian. This programme-specific rule governs all academic language matters relating to the present Joint Master's Programme.

3.1.6 Institutional Profile

The University of Ioannina combines a strong academic tradition with an expanding profile in research, postgraduate education, international cooperation, and student support. In the context of the present Joint International Master's, its role is especially important because it provides the institutional framework for academic approval, programme coordination, and quality assurance.

The Joint International Master's Regulations assign the coordinating role to the **Department of Early Childhood Education** of the University of Ioannina and provide that the University participates through its institutional bodies in the operation and oversight of the programme.

Its institutional profile, as relevant to this Study Guide, is therefore that of an established university capable of supporting an international postgraduate programme through academic governance, pedagogical expertise, and a well-developed educational environment.



3.1.7 School of Education

The **School of Education** forms the immediate academic home of the Joint International Master's on the Greek side. According to the Departmental Study Guide, it was established in **1996-1997** and includes the **Department of Early Childhood Education** and the **Department of Primary Education**.

This School-level context is particularly important because it places the Joint International Master's within a recognised structure devoted to teacher education, pedagogical studies, and educational research. The School provides the broader disciplinary environment in which a postgraduate programme focused on digital

learning, artificial intelligence, and gamification in education can be academically situated.

The Joint International Master's Regulations also refer to the **Dean of the School** in relation to the degree award ceremony, confirming the School's institutional relevance to the programme.

3.1.8 Department of Early Childhood Education

The **Department of Early Childhood Education** is the coordinating academic unit of the Joint International Master's Programme **AI for Digital Learning and Gamification**. The Joint International Master's Regulations clearly state that the Department organises and operates the programme jointly with the **Department of Pedagogy, Klaipėda University**, while bearing primary responsibility for administrative coordination.

According to its current Study Guide, the Department began operating in the academic year **1987-1988**. Over time, it has developed a dynamic academic profile shaped by undergraduate, postgraduate, doctoral, and postdoctoral studies, laboratories, research projects, conferences, international collaborations, and Erasmus mobility activity.

The Department defines its academic mission in terms of cultivating and advancing Educational Sciences through teaching, research, and pedagogical practice. Its profile emphasises the development of knowledge, skills, and competences that prepare graduates to function as educators, researchers, and active citizens in changing educational and social environments.

3.1.9 Academic and Research Environment

The Department of Early Childhood Education offers a substantial academic and research environment highly relevant to the Joint International Master's. Its current Study Guide describes a wide range of academic activity, including undergraduate, postgraduate, and doctoral studies, practical training, research projects, conferences, international collaborations, and Erasmus mobility.

The Department is supported by a broad laboratory infrastructure. The uploaded Study Guide records laboratories in areas such as **Psychology, Pedagogy and Teaching Methodology, New Technologies and Distance Education, Human Rights and Interpersonal Relations, Didactics of Science and Education for Sustainability, Intercultural Education and Differentiated Pedagogy, Social Issues, Media and Education, and Arts, Movement Expression and Teaching Applications**.

In addition, the Department maintains structures related to postgraduate studies, doctoral studies, internal evaluation, ethics, Erasmus coordination, academic advising, and student support. This confirms its capacity to support a contemporary joint postgraduate programme with a strong pedagogical, digital, and research-based orientation.

3.1.10 Relevance to the Joint International Master's

The relevance of the University of Ioannina to the Joint International Master's is both institutional and academic.

Institutionally, it is one of the two partner universities and hosts the **coordinating Department** of the programme. Through its Senate, postgraduate governance framework, School structures, and departmental organisation, it provides the formal basis for the programme's operation and quality oversight.

Academically, the Department of Early Childhood Education contributes a strong foundation in Educational Sciences, pedagogy, research methodology, innovation in teaching and learning, and new technologies in education. Its laboratories, postgraduate experience, and international academic activity make it particularly well suited to support a Joint International Master's focused on **digital learning, artificial intelligence, gamification, and educational innovation**.

For these reasons, the University of Ioannina is not merely one of the partner institutions of the programme, but the principal coordinating institution on which the programme's academic and administrative architecture is built.

3.2 Klaipėda University

3.2.1 History of the Institution

Klaipėda University officially began its activities on **1 January 1991**. Its establishment gave the city of Klaipėda the status of a university city and expanded opportunities for university education and scientific development in Western Lithuania. Over more than three decades, the University has developed into a dynamic and growing multidisciplinary institution with a strong academic and regional mission.

The uploaded institutional material describes Klaipėda University as a university that has progressively refined its scientific and academic directions and strengthened its role in research, education, and international cooperation. The same material notes that the University has developed an increasingly international orientation, including participation in the **EU-CONEXUS** alliance, which has supported joint study programmes, research collaboration, and student and staff mobility.

Within the framework of the present Joint International Master's, Klaipėda University is the Lithuanian partner institution and the home institution of the **Department of Pedagogy**, which co-organises the programme with the University of Ioannina. The Joint International Master's Regulations explicitly identify Klaipėda University as one of the two partner universities of the programme. More information about Klaipėda University: <https://www.ku.lt/en/university/about-university-1>

3.2.2 Faculties and Departments

Klaipėda University is organised as a multidisciplinary university with three faculties and two research institutes. The faculties are the Faculty of Social Sciences and Humanities, the Faculty of Marine Technologies and Natural Sciences, and the Faculty of Health Sciences. The research institutes are the Marine Research Institute and the Institute of Baltic Region History and Archaeology.

For the purposes of the present Joint International Master's, the most relevant academic structure is the **Faculty of Social Sciences and Humanities**, within which the **Department of Pedagogy** is located. An additional KU document lists the departments

participation in European academic networks, and engagement in joint study programmes indicate an active use of **English** in international academic cooperation and programme delivery.

For the purposes of the present Joint International Master's, however, the governing rule is the one stated in the Joint International Master's Regulations: the **language of instruction is English**, and the **Master's Thesis is written in English**, with an extended abstract in **Greek** and **Lithuanian**. This programme-specific provision governs all academic language matters related to the Joint International Master's.

Within the framework of this Joint International Master's, Klaipėda University delivers its academic contribution in full compliance with the programme's English-medium regulations applicable to joint international postgraduate programmes.

3.2.6 Institutional Profile

Klaipėda University is presented in the uploaded materials as a **dynamic, growing multidisciplinary university** with a strong regional role and an expanding international profile. It combines teaching and research across several fields and supports both academic development and regional engagement. The University also seeks to strengthen its standing in the Baltic region and internationally, including through cooperation, mobility, and research integration.

Its institutional profile is especially relevant to the Joint International Master's because it combines educational expertise, research capacity, and international academic openness. Its participation in alliances such as **EU-CONEXUS**, together with its support for joint programmes and mobility, makes it a suitable institutional partner for an international Master's programme in Educational Sciences.

Within the Joint International Master's framework, Klaipėda University contributes through both its institutional bodies and its academic units, especially the Department of Pedagogy and the Faculty of Social Sciences and Humanities.

3.2.7 Faculty of Social Sciences and Humanities

The **Faculty of Social Sciences and Humanities** is the main academic environment of the Joint International Master's on the Lithuanian side. According to the uploaded KU materials, the Faculty provides studies across all three cycles, as well as research, cultural, and educational activities. Its mission is to educate highly qualified specialists in the humanities, education, and social sciences, while fostering humanistic values, openness to innovation, and the practical application of knowledge.

A separate KU document lists the Faculty's departments and centres, including the **Department of Pedagogy**, and shows that the Faculty provides a broader interdisciplinary setting relevant to educational sciences, communication, social inclusion, and public engagement.

This Faculty context places the Joint International Master's within an academic environment that supports innovation in education, interdisciplinary collaboration, and research-informed pedagogical development.



3.2.8 Department of Pedagogy

The **Department of Pedagogy** is the cooperating academic department of Klaipėda University in the Joint International Master's Programme **AI for Digital Learning and Gamification**. Its history dates back to **1991**, and its current structure was gradually shaped through the reorganisation of several pedagogical departments by **2016**.

The Department is active across all three study cycles in Educational Sciences. It offers a **Bachelor's degree in Childhood Pedagogy**, Master's programmes in **Educational Sciences, Social Pedagogy, and Educational Management**, and contributes to **doctoral studies in Educational Sciences** jointly with other Lithuanian universities. It also provides continuing studies, retraining modular studies, socio-educational research, project activity, and cooperation with educational and non-formal institutions.

The uploaded material also identifies strong academic expertise among its staff in areas directly relevant to the Joint International Master's, including **research methodology, AI in education, educational technology, teacher training, creativity, equal opportunities in education, social and intercultural inclusion, and educational quality**.

In the Joint International Master's Regulations, the Department of Pedagogy is explicitly assigned a defined role: it provides **complementary administrative and technical support**, including the **provision of distance learning infrastructure**, while participating fully in the programme's academic cooperation.

3.2.9 Academic and Research Environment

Klaipėda University provides a strong academic and support environment relevant to the Joint International Master's. At Faculty and Department level, the uploaded materials show active involvement in teaching, research, socio-educational services,

project activities, and cooperation with academic and non-academic institutions. The Department of Pedagogy's course portfolio and staff expertise demonstrate a broad and relevant academic base in Educational Sciences.

The University also offers a structured student-support environment. According to the uploaded support material, students may access admissions guidance, career advice, study-abroad support, financial and social support, psychological support, spiritual support, housing-related services, disability-related adaptations, and other welfare services.

Digitally, Klaipėda University provides a **Virtual Learning Environment (VLE)** that supports communication, assignments, and mentoring for students and staff. This is especially important because the Joint International Master's is designed around synchronous distance education and digitally supported learning processes.

The academic calendar uploaded for KU also confirms a stable semester-based academic structure with teaching and examination periods, which facilitates coordination with the unified calendar of the Joint International Master's.

3.2.10 Relevance to the Joint International Master's

The relevance of Klaipėda University to the Joint International Master's is both academic and institutional.

Institutionally, Klaipėda University is one of the two official partner universities of the programme, and its academic bodies participate in the governance and quality supervision of the Joint International Master's. The Joint International Master's Regulations explicitly include the **Senate of Klaipėda University** and the **Educational Sciences Study Program Committee** among the competent bodies for the programme's operation.

Academically, the **Department of Pedagogy** contributes essential expertise in Educational Sciences, research methodology, AI in education, educational technology, inclusion, and pedagogical innovation. Its continuing studies activity, socio-educational engagement, and broad curricular base strengthen the interdisciplinary and international identity of the programme.

Operationally, Klaipėda University also supports the programme through student services and digital infrastructure, including the VLE and institutional support mechanisms, which are directly relevant to the programme's blended and distance-learning design.

For these reasons, Klaipėda University is not simply a formal partner of the Joint International Master's, but a full academic and institutional collaborator whose contribution is essential to the programme's international, pedagogical, and digital character.

3.3 Contribution of the Cooperating Departments

The Joint International Master's Programme **AI for Digital Learning and Gamification** is based on the academic cooperation between two departments with complementary expertise in the field of Educational Sciences: the **Department of Early Childhood Education** of the **University of Ioannina** and the **Department of Pedagogy** of **Klaipėda University**. The Joint International Master's Regulations explicitly establish that the

programme is jointly organised by these two academic units, while assigning the coordinating role to the Department of Early Childhood Education of the University of Ioannina.

The **Department of Early Childhood Education** contributes to the programme through its established profile in pedagogy, teacher education, educational research, curriculum development, and innovation in learning and teaching. Its academic environment includes undergraduate, postgraduate, doctoral, and postdoctoral activity, international collaborations, and a strong laboratory infrastructure. The Department's current Study Guide also demonstrates active engagement in areas such as educational methodology, digital and distance education, intercultural education, arts in education, human rights, sustainability, and applied pedagogical practice. These characteristics make it particularly well suited to support the pedagogical, research-based, and interdisciplinary orientation of the Joint International Master's.

The **Department of Pedagogy** contributes to the programme through its broad activity in Educational Sciences across all three study cycles, its continuing education and retraining initiatives, and its expertise in educational technology, research methodology, teacher education, social and intercultural inclusion, and AI in education. The uploaded institutional material also shows that the Department maintains active links with educational institutions, project activity, and socio-educational services in the wider region. This profile strengthens the programme's comparative, international, and practice-oriented dimension.

The academic contribution of the two departments is reflected in several dimensions of the programme. These include joint curriculum development, participation in teaching, support for student supervision, contribution to the Master's Thesis component, engagement in quality assurance procedures, and participation in the academic governance of the programme through the common bodies defined in the Regulations.

At the same time, the two departments contribute in distinct but complementary ways. The Department of Early Childhood Education provides the programme with its coordinating base, its pedagogical and research tradition, and its experience in managing advanced educational programmes. The Department of Pedagogy contributes strong expertise in Educational Sciences, curriculum innovation, educational technology, and digital support for academic delivery. Together, these contributions support a programme that combines pedagogy, technology, ethics, research, and international academic cooperation in a balanced and coherent way.

The partnership between the two departments is therefore not merely formal. It is substantive, academic, and operational. It gives the Joint International Master's its distinctive identity as a programme built on complementary institutional traditions and a shared commitment to innovation in digital learning and education.

3.4 The Joint Character of the Programme

The Joint International Master's Programme **AI for Digital Learning and Gamification** is designed as a genuinely joint academic programme rather than as two parallel national programmes operating under a common title. Its joint character is embedded in its governance, academic structure, student status, recognition procedures, quality assurance arrangements, and final degree award.

At the governance level, the programme is administered through common bodies that include representation from both partner universities. According to the Joint International Master's Regulations, the competent bodies include the **Senates of both universities**, the **Institutional Postgraduate Studies Committee of the University of Ioannina**, the **Educational Sciences Study Program Committee of Klaipėda University**, the **Programme Study Committee**, the **Coordinating Committee**, and the **Director of the Joint Master's Programme**. This structure ensures that the strategic direction, academic oversight, and operational coordination of the programme are shared responsibilities of the two partner institutions.

The joint nature of the programme is equally evident in its academic design. The programme has a unified curriculum of **90 ECTS**, structured over **three semesters**, with common course titles, common progression, and a shared thesis component. The Regulations also state that all ECTS credits earned through the programme are fully and automatically recognised by both the **University of Ioannina** and **Klaipėda University**.

Student status within the programme further confirms its joint character. Each student admitted to the Joint International Master's is formally enrolled at **both universities** for the full duration of study. This dual enrolment reflects the programme's shared institutional ownership and ensures that students benefit from the academic resources, digital infrastructure, and support services of both institutions.

The language arrangements of the programme also reflect its international and joint identity. The programme is taught in **English**, while the **Master's Thesis** is written in **English** and includes an extended abstract in **Greek** and **Lithuanian**. This trilingual structure symbolically and academically reflects the collaboration between the two partner countries while maintaining English as the common language of instruction.

Its mode of delivery is likewise shaped by cooperation between the two universities. The programme is organised through **synchronous distance education**, with additional in-person academic work, and is supported by digital platforms and distance-learning infrastructure provided by the partner institutions. The Regulations explicitly state that the Department of Pedagogy of Klaipėda University provides complementary administrative and technical support, including distance-learning infrastructure, while the Department of Early Childhood Education of the University of Ioannina bears primary administrative coordination.

The joint character of the programme is also confirmed in quality assurance and evaluation. The Regulations provide for internal evaluation involving the quality assurance structures of both institutions, as well as cooperative review of the programme's performance and development. This means that the programme is monitored and improved through shared academic responsibility rather than unilateral institutional control.

Finally, the joint nature of the programme is expressed in the award itself. Upon successful completion of the programme, students receive a **Joint Master's Degree in Educational Sciences**. The Regulations also specify that the Joint Diploma bears the official logos of both institutions and is signed by the appropriate authorities of both universities.

For all these reasons, the Joint International Master's should be understood as a fully integrated international programme built on shared academic design, shared

governance, shared responsibility, and shared institutional commitment. Its joint character is therefore foundational to its identity and central to the student experience.

4. Mission, Vision and Educational Philosophy

4.1 Mission

The mission of the Joint International Master's Programme **AI for Digital Learning and Gamification** is to provide advanced postgraduate education and research training in the fields of **artificial intelligence in education, digital learning, and gamification**, within a strongly interdisciplinary and international academic environment. The programme seeks to prepare graduates who are able to understand, design, evaluate, and apply innovative educational approaches that integrate digital technologies, AI-supported tools, and learner-centred pedagogical methods.

According to the Joint International Master's Regulations, the subject of the programme concerns the application of high-quality scientific research and the training of specialists with the knowledge required to contribute to the advancement of science in the fields of **Artificial Intelligence applications, Digital Education, and Gamification in education, while also acquiring pedagogical competence**. The Regulations further state that the programme **provides pedagogical competence to students** and equips them with significant knowledge, skills, attitudes, and perceptions that promote education and research.

In this context, the mission of the programme is not limited to the transmission of specialised knowledge. It also includes the cultivation of critical thinking, ethical responsibility, research capacity, professional competence, and **pedagogical competence** for the design and implementation of digital and AI-enhanced educational environments. The programme aims to respond to contemporary educational challenges by preparing graduates who can contribute meaningfully to innovation in schools, universities, training settings, and other learning environments.

4.2 Vision

The vision of the Joint International Master's is to become a distinctive international postgraduate programme in Educational Sciences that addresses the educational implications of digital transformation through a balanced integration of **pedagogy, technology, research, and ethics**. The programme aspires to develop graduates who are capable not only of adapting to technological change, but also of shaping that change in academically grounded, socially responsible, and pedagogically meaningful ways.

The programme's vision is rooted in the belief that the future of education requires new forms of expertise capable of linking educational theory with emerging technologies. Artificial intelligence, gamification, digital learning environments, virtual assistants, learning analytics, and internet ethics are not treated simply as technical topics, but as areas that must be approached through critical reflection, scientific inquiry, and pedagogical judgement.

As a joint programme between the **University of Ioannina** and **Klaipėda University**, the Joint International Master's also reflects a broader European vision of higher education based on cooperation, academic mobility, shared quality standards, and internationalised learning. Its vision is therefore both academic and institutional: to contribute to the advancement of Educational Sciences through a programme that is

innovative, collaborative, internationally visible, and responsive to the changing needs of contemporary education.

4.3 Educational Philosophy

The educational philosophy of the programme is based on the understanding that contemporary education must be approached as an evolving and interdisciplinary field in which pedagogy, technology, research, and ethical responsibility are closely interconnected. The programme is grounded in a **student-centred, research-informed, and innovation-oriented** educational philosophy that supports both academic development and professional application.

A central principle of the programme is that the use of technology in education should always be guided by pedagogical purpose. For this reason, the curriculum does not treat AI, digital platforms, gamification, and human-machine interaction as isolated technical tools, but as elements of broader educational processes that must be critically designed, evaluated, and adapted to learner needs. This philosophy is reflected in the structure of the curriculum, which moves from foundations in digital education and research methodology to more advanced applications in learning design, analytics, ethics, gamification, and virtual assistants.

The programme also places strong emphasis on the integration of **theory and practice**. The Regulations explicitly identify the programme as an innovative study programme that combines theory and practice and equips participants to create educational learning scenarios that include interactive, engaging, and personalised activities supported by AI and ICT.

A further core principle is the development of **pedagogical competence**. In line with the Joint International Master's Regulations, the programme is designed not only to offer specialised knowledge in digital learning, artificial intelligence, and gamification, but also to support students in acquiring pedagogical competence for the design, implementation, and evaluation of teaching and learning processes in contemporary educational settings. This pedagogical dimension is fundamental to the identity of the programme and distinguishes it from programmes focused only on educational technology in a narrow technical sense.

Another key principle is **ethical and responsible innovation**. The educational philosophy of the programme recognises that digital transformation in education must be accompanied by critical awareness of internet safety, privacy, data protection, fairness, accessibility, and the responsible use of AI. This is reflected directly in both the curriculum and the Regulations, which highlight internet security, internet ethics, and responsible digital practices as core dimensions of the programme.

The programme also adopts an **international and collaborative perspective** on learning. As a joint degree delivered by two universities in different countries, it is built on academic cooperation, intercultural exchange, and shared responsibility for quality and innovation. Its educational philosophy is therefore aligned with a broader European approach to postgraduate education, in which students learn in a multilingual, transnational, and digitally supported academic environment.

Finally, the programme is guided by the principle that postgraduate education should foster both **specialised expertise** and **broader academic maturity**. It aims to cultivate graduates who can conduct research, make informed decisions, design meaningful

educational interventions, exercise pedagogical judgement, and contribute responsibly to the future of digital learning and educational change. In this sense, the educational philosophy of the programme is not only technologically informed, but also human-centred, pedagogically grounded, and socially responsive.

4.4 Core Educational Principles

The mission, vision, and educational philosophy of the Joint International Master's may be summarised through the following core principles:

Academic excellence and research orientation. The programme is designed to promote advanced scientific knowledge and the development of research competence in Educational Sciences and technology-enhanced learning.

Integration of pedagogy and technology. The curriculum is built on the principle that digital tools and AI applications must be understood and used within pedagogically meaningful frameworks.

Pedagogical competence. The programme aims to support students in acquiring pedagogical competence alongside specialised knowledge in artificial intelligence, digital learning, and gamification in education.

Innovation with responsibility. The programme promotes innovation in education while maintaining a strong commitment to ethics, safety, inclusion, and responsible digital practice.

Theory-practice connection. The programme seeks to combine conceptual understanding with practical application in real and emerging educational contexts.

Interdisciplinarity and international cooperation. The programme is built on collaboration between two universities and on the combination of perspectives from Educational Sciences, digital learning, AI, gamification, and related fields.

Student-centred and future-oriented learning. The programme aims to develop autonomous, reflective, and professionally capable graduates who are prepared to respond to the future challenges of education and learning.

5. Programme Objectives and Intended Learning Outcomes

5.1 Programme Objectives

The Joint International Master's Programme **AI for Digital Learning and Gamification** is designed to provide advanced postgraduate education in a field that combines **Educational Sciences, digital innovation, artificial intelligence, and gamification**. Its objectives are grounded in the programme's interdisciplinary character and in its commitment to integrating theory, research, and applied learning within an international academic framework. The intended learning outcomes of the programme are structured in accordance with national and European higher education frameworks and encompass knowledge and its application, research skills, subject-specific competences, social competences, and personal competences.

More specifically, the programme aims:

1. **To provide advanced academic knowledge** in the areas of digital education, artificial intelligence in education, gamification, learning design, learning analytics, internet safety, AI ethics, and human-machine interaction.
2. **To develop research competence** in Educational Sciences, enabling students to understand, design, conduct, and evaluate research using appropriate qualitative and quantitative methodologies.
3. **To cultivate pedagogical competence**, in accordance with the Joint International Master's Regulations, so that graduates are able to apply educational theories, pedagogical principles, and learner-centred approaches in digitally enriched and AI-supported learning environments.
4. **To strengthen students' ability to design and evaluate innovative learning environments**, including interactive, engaging, and personalised educational scenarios supported by AI and ICT tools.
5. **To promote critical and ethical awareness** in relation to the use of digital technologies in education, especially with regard to internet safety, privacy, digital responsibility, data use, and AI ethics.
6. **To support interdisciplinary and international academic development**, enabling students to work across disciplinary boundaries and in collaborative learning and research contexts shaped by European and international higher education cooperation.
7. **To prepare graduates for professional and academic progression**, including educational innovation, curriculum design, digital learning development, pedagogical leadership, and further research at doctoral level.

These objectives reflect the overall mission of the programme as an innovative Joint International Master's that combines educational theory and practice, academic research, technological development, and pedagogical competence in response to contemporary educational challenges.

5.2 Intended Learning Outcomes

Upon successful completion of the programme, graduates are expected to have acquired advanced knowledge, specialised skills, and broader competences that enable them to operate effectively in educational, research, and innovation-oriented settings.

For clarity and consistency with postgraduate programme design, the intended learning outcomes are presented under the categories of **Knowledge**, **Skills**, and **Competences**.

5.2.1 Knowledge

By the end of the programme, graduates are expected to demonstrate advanced knowledge and critical understanding of:

- the main theoretical approaches to **digital education** and **digital cultures**;
- the principles and methods of **research methodology in education**, including the foundations of qualitative and quantitative inquiry;
- core concepts related to **digital skills**, **social media**, and digital participation in educational contexts;
- the use of AI-powered content creation and smart educational technologies in teaching and learning;
- the principles of **digital pedagogy** and the role of language and communication in digital learning environments;
- the theoretical and applied dimensions of **AI and gamification in education**;
- the role of AI in learning design, analytics, and educational decision-making;
- issues of **internet safety**, **cybersecurity**, **privacy**, and **AI ethics** in digital learning environments;
- systemic approaches to **gamification** and their application in educational and related contexts;
- the principles of **human-machine interaction** and the use of **virtual assistants** in educational environments;
- the pedagogical foundations necessary for the design, implementation, and evaluation of learning processes in contemporary digital and AI-supported settings.

5.2.2 Skills

By the end of the programme, graduates are expected to be able to:

- design and develop digitally enriched educational activities and learning environments grounded in pedagogical principles;
- apply **qualitative and quantitative research methods** in the field of education and interpret research findings critically;
- use AI-supported tools for content creation, learning design, and personalised educational planning;
- analyse educational data and apply **learning analytics** to support evidence-based decision-making;
- integrate principles of **gamification** into teaching, training, and learner engagement strategies;
- evaluate the educational value, limitations, and ethical implications of digital systems, virtual assistants, and AI-supported tools;
- identify and address issues related to **internet safety**, **ethical technology use**, and responsible digital participation;

- develop pedagogically sound educational interventions that combine technology, learner-centred design, and academic evidence;
- communicate academic and professional ideas effectively in an international English-medium environment;
- conduct an independent research project through the preparation and defence of a **Master's Thesis**.

5.2.3 Competences

By the end of the programme, graduates are expected to be able to:

- exercise **pedagogical competence** in the design, implementation, and evaluation of learning and teaching processes in digital and AI-enhanced educational environments;
- work autonomously and responsibly in academic, educational, and professional contexts requiring advanced knowledge and informed judgement;
- collaborate effectively in **interdisciplinary** and **international** teams and learning communities;
- make ethically informed decisions concerning technology use, digital practices, and innovation in education;
- contribute to curriculum innovation, educational improvement, and institutional development in schools, universities, training organisations, and related settings;
- combine pedagogical insight, research evidence, and technological understanding in order to respond to contemporary educational challenges;
- pursue further academic development and research, including doctoral studies and participation in research and innovation projects;
- act as reflective professionals and researchers capable of contributing responsibly to the future of digital learning and education.

5.3 Alignment of Learning Outcomes with the Curriculum

The intended learning outcomes are directly supported by the curriculum structure of the programme.

The **first semester** establishes the foundations of the programme through courses in Digital Education and Cultures, Research Methodology in Education, Digital Skills and Social Media, AI-Powered Content Creation & Smart Educational Technologies, and Digital Pedagogy and Language in Digital Contexts. These courses primarily support the development of theoretical knowledge, methodological understanding, and foundational pedagogical and digital skills.

The **second semester** develops the more advanced and applied dimensions of the programme through courses in AI and Gamification in Education, AI in Learning Design, Analytics, and Decision-Making, Internet Safety - AI Ethics, Systemic Studies and Applications of Gamification, and Human-Machine Interaction and Virtual Assistants. These courses strengthen applied competences, ethical awareness, and the ability to integrate technology into educational innovation.

The **third semester**, devoted to the **Master's Thesis**, supports the integration of the programme's knowledge, skills, and competences through independent postgraduate research. It enables students to demonstrate research capacity, academic maturity,

and the ability to apply theoretical, methodological, and pedagogical understanding to a focused topic within the scope of the programme.

This structure ensures that the learning outcomes are not treated as abstract declarations but are progressively developed through the curriculum and assessed through coursework and thesis work.

5.4 Graduate Profile

Graduates of the Joint International Master's are expected to emerge as professionals and researchers with an integrated profile that combines:

- advanced knowledge of Educational Sciences and digital learning;
- specialised understanding of artificial intelligence and gamification in education;
- research competence in educational inquiry;
- critical and ethical awareness regarding digital innovation;
- and clearly articulated **pedagogical competence** for teaching, learning design, and educational intervention in contemporary contexts.

This graduate profile reflects the distinctiveness of the programme as a joint international Master's degree that combines pedagogy, technology, ethics, and research in a coherent and future-oriented educational framework.

6. Career Opportunities and Further Study

6.1 Professional Orientation of the Programme

The Joint International Master's Programme **AI for Digital Learning and Gamification** is designed to prepare graduates for academic, educational, and professional roles that require advanced knowledge of **digital learning, artificial intelligence in education, gamification, learning design, educational research, and pedagogical competence**. Its interdisciplinary structure and international character support the development of graduates who are able to respond to the changing demands of contemporary education and training environments.

According to the Joint International Master's Regulations, the programme is addressed to individuals who seek to gain a competitive advantage in their career, lead change in the field of education, and contribute to shaping the future of digital learning. The Regulations also specify that the programme provides significant knowledge, skills, attitudes, and perceptions that promote education and research, while also supporting the acquisition of pedagogical competence.

The programme's curriculum therefore has both an academic and a professional orientation. It prepares graduates not only to understand the theoretical and methodological foundations of the field, but also to design, implement, evaluate, and critically reflect on digital and AI-supported educational practices in a wide variety of institutional and professional contexts.

6.2 Career Opportunities

Graduates of the programme may pursue professional opportunities in a range of fields related to education, training, digital innovation, curriculum development, and research. Depending on their prior academic background and professional trajectory, they may be employed in public, private, or non-formal education settings, as well as in organisations involved in educational technology, digital learning, policy, and training.

Indicative professional pathways include:

Educational technology and digital learning. Graduates may work in the design, development, implementation, or evaluation of digital learning environments, e-learning programmes, online and blended courses, and AI-supported educational applications.

Instructional and learning design. The programme's emphasis on AI in learning design, analytics, and decision-making prepares graduates for roles involving the planning, adaptation, and assessment of learning experiences in schools, universities, training centres, and lifelong learning contexts.

Gamification and learner engagement. The dedicated coursework in AI and gamification, as well as systemic studies and applications of gamification, supports professional roles related to the design of interactive, motivating, and learner-centred educational experiences.

Teaching and pedagogical innovation. Because the programme explicitly supports the development of **pedagogical competence**, graduates may apply their expertise in

teaching, teacher education, curriculum enrichment, and innovation in educational practice, especially in digitally enriched settings.

Educational research and evaluation. The strong methodological and thesis-based components of the programme prepare graduates to participate in research projects, programme evaluation, learning analytics, and evidence-based educational development.

Policy, administration, and project work. Graduates may also contribute to educational institutions, ministries, NGOs, research bodies, and organisations involved in innovation, inclusion, digital policy, teacher development, and educational planning. The programme's interdisciplinary and international profile supports such broader forms of professional engagement.

These opportunities should be understood in relation to graduates' previous degree background, national professional frameworks, and the type of organisation or sector in which they seek employment.

6.3 Indicative Professional Roles

On the basis of the curriculum and intended learning outcomes of the programme, graduates may be prepared for roles such as:

- specialist in digital education and e-learning;
- instructional designer or learning designer;
- educational technology consultant;
- AI-enhanced learning designer;
- gamification specialist in education and training;
- curriculum and educational content developer;
- learning analytics or educational data support specialist;
- researcher in educational technology and digital learning;
- programme or project associate in educational innovation initiatives;
- educator or trainer in digitally enriched learning settings, where compatible with prior qualifications and applicable professional frameworks.

These titles are indicative rather than exhaustive, and they should not be interpreted as automatic professional certification in any regulated profession unless such recognition is separately provided under the applicable legal framework.

6.4 Academic Progression and Further Study

The programme also offers a strong basis for **further academic development**, especially for students wishing to pursue research-oriented careers. Its emphasis on research methodology, educational inquiry, and the Master's Thesis supports progression to **doctoral studies** in Educational Sciences and related fields.

The academic areas to which the programme may lead include, among others:

- Educational Sciences;
- Digital Education;
- Artificial Intelligence in Education;
- Gamification and Learning Design;
- Educational Technology;

- Learning Analytics;
- Curriculum and Pedagogical Studies;
- Human-Machine Interaction in educational contexts;
- Ethics and digital responsibility in education.

Because the programme is delivered jointly by two universities and is embedded in an international academic environment, it also supports graduates in developing the academic maturity, intercultural competence, and research orientation necessary for participation in international research networks, collaborative projects, and further postgraduate specialisation.

6.5 Employability and Contemporary Relevance

The professional relevance of the programme is closely linked to contemporary developments in education. Digital transformation, AI-supported learning, online and blended teaching, data-informed educational decision-making, and ethical questions surrounding technology use are increasingly central to educational institutions and training organisations. The programme responds directly to these developments through a curriculum that combines theoretical grounding, research competence, technological understanding, and pedagogical application.

Its graduates are therefore expected to be well positioned for professional contexts in which educational institutions seek staff and collaborators capable of working across pedagogy and technology, designing innovative learning environments, supporting digital transition, and responding critically and responsibly to the opportunities and risks of AI in education.

In this sense, the programme's employability dimension is not based only on technical expertise, but on a broader professional profile that combines **research competence**, **ethical awareness**, **pedagogical competence**, and the ability to operate in international and interdisciplinary contexts.

6.6 Concluding Perspective

The Joint International Master's **AI for Digital Learning and Gamification** prepares graduates for a field that is rapidly evolving and increasingly important across all levels of education and training. By combining educational theory, technological innovation, research training, ethics, and pedagogical competence, the programme supports both immediate professional development and long-term academic progression.

Its graduates are expected to contribute not only as users of new technologies, but as reflective professionals and researchers capable of shaping the future of digital learning in responsible, creative, and pedagogically meaningful ways.

7. Governance and Administration of the Programme

7.1 Governance Framework

The Joint International Master's Programme **AI for Digital Learning and Gamification** is governed through a shared inter-institutional framework that reflects its character as a genuinely joint degree. The Joint International Master's Regulations specify that the programme is jointly organised by the **Department of Early Childhood Education, School of Education, University of Ioannina** and the **Department of Pedagogy, Klaipėda University**, with the Department of Early Childhood Education serving as the **coordinating Department**.

The same Regulations provide that the governance of the programme is exercised through a set of institutional and programme-level bodies involving both partner universities. This framework ensures shared academic oversight, coordinated administration, and joint responsibility for the quality, operation, and development of the programme.

7.2 Competent Bodies of the Programme

According to the Joint International Master's Regulations, the competent bodies for the operation and administration of the programme are:

- the Senates of both universities;
- the Institutional Postgraduate Studies Committee of the University of Ioannina;
- the Educational Sciences Study Program Committee of Klaipėda University;
- the **Programme Study Committee (PSC)** of the Joint Master's Programme;
- the **Coordinating Committee (CC)** of the Joint Master's Programme;
- the Director of the Joint Master's Programme.

This multi-level governance structure reflects the academic and institutional responsibilities of both partners and ensures that the programme operates within the regulatory frameworks of the two universities while maintaining a unified academic identity.

7.3 The Senates of the Partner Universities

The **Senates of the two partner institutions** hold the highest level of institutional authority relevant to the programme. According to the Regulations, their competences include the approval of the establishment of the postgraduate programme, any amendment of its founding decision, the extension of its duration, the constitution of the Programme Study Committee in the case of joint programmes, and decisions related to the abolition of such programmes where applicable.

The role of the Senates is therefore foundational. It ensures that the programme is institutionally anchored and formally recognised at the highest academic level within both universities.

7.4 Institutional Postgraduate and Study Programme Bodies

7.4.1 Postgraduate Studies Committee of the University of Ioannina

The **Postgraduate Studies Committee of the University of Ioannina** participates in the governance framework of the Joint International Master's through its competences in relation to postgraduate programmes. The Regulations assign to this body responsibilities such as submitting opinions to the Senate on the establishment or amendment of postgraduate programmes, preparing relevant draft regulations, monitoring compliance with programme regulations, supervising the implementation of legislation and institutional rules, and monitoring procedures related to tuition fee exemptions.

Its role is therefore particularly important for ensuring that the programme remains aligned with the broader postgraduate regulatory framework of the University of Ioannina.

7.4.2 Educational Sciences Study Program Committee of Klaipėda University

The **Educational Sciences Study Program Committee of Klaipėda University** is the corresponding academic body on the Lithuanian side. According to the Joint International Master's Regulations, this committee is responsible for quality supervision of the study process in accordance with university study quality indicators. Its tasks include approval of study plans, review and proposal of programme amendments, certification and improvement of study subjects, follow-up on evaluation recommendations, and cooperation with university and faculty bodies concerned with quality and academic development.

Its inclusion in the governance structure ensures that the programme is also embedded in the academic quality framework of Klaipėda University.

7.5 Programme Study Committee (PSC)

The **Programme Study Committee (PSC)** is the principal joint academic body of the programme. According to the Regulations, it is constituted by decision of the Senate upon recommendation of the Assemblies of the cooperating departments organising the Joint Master's Programme. The PSC consists of **four members from the University of Ioannina** and **four members from Klaipėda University**, each elected for a **three-year term**. Its members are drawn from the teaching and research staff of the cooperating institutions.

The Regulations also provide that the exact number of members and the representation of each cooperating institution are determined in the **Special Cooperation Protocol** of the programme. Emeritus Professors may also participate in the PSC, provided that they carry out teaching work in the Joint International Master's.

The PSC is central to the academic identity of the programme because it embodies the shared academic responsibility of the two partner institutions.

7.6 Coordinating Committee (CC)

The **Coordinating Committee (CC)** is constituted by decision of the Programme Study Committee and serves for a **two-year term**. According to the Regulations, it consists of **two faculty members from the University of Ioannina, two faculty members from Klaipėda University, and the Director of the Programme**.

The CC is responsible for monitoring and coordinating the operation of the programme. Its competences include:

- preparing the annual budget and proposed amendments, where the programme has resources;
- preparing the programme report;
- approving the incurrence of programme expenditures;
- approving the granting of scholarships;
- recommending the allocation of teaching work;
- recommending the invitation of visiting professors;
- preparing draft proposals for amendments to the study programme;
- recommending the redistribution of courses between semesters and other measures related to the qualitative upgrading of the programme.

The Coordinating Committee is therefore the main body responsible for the day-to-day academic and operational coordination of the programme.

7.7 Director of the Joint Master's Programme

The **Director of the Joint Master's Programme** has a central coordinating and academic leadership role. According to the Regulations, the Director:

- chairs both the Coordinating Committee and the Programme Study Committee;
- prepares the agenda and convenes their meetings;
- makes recommendations on matters concerning the organisation and operation of the programme;
- makes recommendations to the programme bodies and the partner institutions on matters relating to effective programme operation;
- acts as the **Scientific Coordinator** of the programme;
- monitors the implementation of decisions adopted by the programme bodies;
- monitors the execution of the programme budget;
- exercises any other competence defined in the founding decision of the programme.

The Director therefore plays a key role in ensuring coherence between academic strategy, programme administration, and inter-institutional cooperation.

7.8 Administrative Coordination and Secretariat Support

The Joint International Master's Regulations state that secretarial and administrative support for the programme is provided **jointly** by the **Department of Early Childhood Education of the University of Ioannina** and the **Department of Pedagogy of Klaipėda University**, each acting in accordance with its own institutional procedures and capacities. At the same time, the Regulations clearly state that the **Department of Early Childhood Education** bears **primary responsibility for administrative coordination**, while the **Department of Pedagogy** provides complementary

administrative and technical support, including support for distance learning infrastructure.

This arrangement reflects the joint character of the programme while also ensuring a clear administrative centre for coordination and continuity.

7.9 Academic Decision-Making and Quality Development

The programme's governance structure supports not only administrative management but also academic development and quality enhancement. Through the PSC, the CC, and the institutional quality-related bodies of both universities, the programme is able to review its curriculum, monitor its delivery, evaluate its performance, and introduce improvements where necessary. The Regulations explicitly provide for curriculum renewal, redistribution of courses, quality improvement measures, and follow-up procedures linked to evaluation processes.

This governance model is especially important for a joint and international programme, since it ensures that academic decisions are made cooperatively and that responsibility for programme quality is shared between the two partner institutions.

7.10 Governance and the Joint Character of the Programme

The governance and administration of the Joint International Master's are integral to its identity as a genuinely joint programme. Academic authority is not concentrated in a single institution, but distributed across shared bodies with representation from both partners. At the same time, the coordinating role of the University of Ioannina ensures administrative clarity and institutional continuity.

This combination of **shared governance** and **clear coordination** allows the programme to function as an integrated academic entity. It also provides students and staff with a governance structure that is both collaborative and operationally effective, consistent with the broader goals of academic quality, international cooperation, and joint responsibility in European higher education.

8. Admission Requirements and Selection Process

8.1 General Admission Framework

Admission to the Joint International Master's Programme **AI for Digital Learning and Gamification** is based on an **open call for applications**. According to the Joint International Master's Regulations, the programme announces available places through a public procedure for the admission of graduates, and the relevant call is published on the programme website as well as on the websites of the **University of Ioannina** and **Klaipėda University**. The announcement includes the programme details, the maximum number of admissions, the required supporting documents, the method of selection, and the application deadline.

The admission process is designed to ensure transparency, equality, and merit-based selection. The Regulations explicitly state that the selection is based on **objective criteria** that safeguard the principles of **equality** and **meritocracy**.

8.2 Eligible Applicants

The programme admits holders of a **first-cycle degree** from Higher Education Institutions in **Greece, Lithuania**, or equivalent institutions abroad. The Regulations provide that the programme is open to graduates from a broad range of disciplinary backgrounds, reflecting its interdisciplinary orientation.

More specifically, the programme is addressed to:

- graduates of **Humanities, Education, and Social Sciences**, including fields such as pedagogy, psychology, philosophy, sociology, philology, and history;
- graduates of **Natural Sciences and Computer Science**, including mathematics, physics, chemistry, biology, and engineering, especially those interested in educational technology and AI-supported teaching;
- graduates of **Health Sciences** interested in educational and support applications of AI in clinical or academic environments;
- graduates of **Economic Sciences** interested in AI and gamification techniques for training, team development, and management;
- graduates of **other disciplines**, including engineers and architects who wish to focus on advanced educational and creative tools;
- **adult education professionals** interested in participation, motivation, and self-directed learning;
- professionals in **educational material design** and programme development who wish to integrate AI technologies and game elements into learning design.

This wide range of eligible backgrounds reflects the programme's interdisciplinary and applied character.

8.3 Recognition of Qualifications

The **Programme Study Committee** is responsible for the recognition of qualifications for the purpose of admission to the programme. The Joint International Master's Regulations state that the recognition of foreign qualifications is carried out in accordance with the **Lisbon Recognition Convention** and the applicable national

legislation of each partner country. Where national legislation requires formal recognition of qualifications awarded by the other partner institution, recognition is carried out by the competent national authority or by the enrolling institution in accordance with its national procedures.

This provision is important in a joint and international programme, as it ensures that applicants from different national systems are assessed through recognised academic procedures.

8.4 Language Requirements

The language of instruction of the programme is English; therefore, applicants are required to demonstrate an adequate level of English proficiency. The Regulations specify that the required level is B2. English language proficiency may be demonstrated by submitting a recognised international language certificate (e.g., IELTS, TOEFL, or an equivalent qualification).

Since the entire programme is delivered in English and the **Master's Thesis** is also written in English, English-language competence is an essential admission requirement and a necessary condition for successful participation in the academic and research activities of the programme.

8.5 Announcement of Available Places

The Joint International Master's Regulations provide that the **Programme Study Committee** is responsible for announcing the available places. The call for applications is published on the programme website and on the websites of both partner universities. The announcement includes all core information relevant to prospective applicants, including programme details, maximum number of admissions, required documents, selection method, and application deadline. The deadline may be extended by decision of the Programme Study Committee.

This process ensures a common and coordinated admission framework across the two partner institutions.

8.6 Evaluation of Applications

Based on pre-established and publicly available selection criteria, as defined in the Joint International Master's Regulations and published on the university's website, the Committee ranks candidates in descending order and recommends admission to the programme up to the number of available places. The Programme Study Committee then approves the enrolment of the selected candidates.

This two-step process supports academic scrutiny and formal programme-level approval.

8.7 Selection Criteria

The Joint International Master's Regulations define a points-based selection system with a **total of 100 points**. The criteria are as follows:

- **final degree grade** (or grade point average (GPA), where applicable): up to **30 points**;

- **oral interview**, conducted in English (including assessment of the candidate's motivation): up to **25 points**;
- **research or professional activity**, including publications in a related field: up to **25 points**;
- motivation letter: up to 10 points;
- **two letters of recommendation** from academic or professional referees: up to **10 points**.

These criteria reflect the programme's aim to combine academic merit, motivation, research orientation, and professional relevance in the admission process.

8.8 Interview Procedure

The Regulations explicitly include an **oral interview** as part of the selection process and assign it a significant weight in the overall ranking. The interview is conducted by the Application Evaluation Committee and is evaluated together with the candidate's broader profile, including motivation, academic background, and research or professional activity.

Within the overall admission framework, the interview functions as an important qualitative element that complements documentary evaluation and helps assess the candidate's fit with the programme's interdisciplinary and research-oriented profile.

8.9 Required Application Documents

Based on the Regulations, the admission process includes submission of supporting documents that allow the competent bodies to evaluate the applicant's academic and professional profile. These include, as relevant to the selection criteria:

- degree documentation;
- evidence of English-language proficiency;
- a motivation letter;
- documentation of **research or professional activity**, including publications where applicable;
- two letters of recommendation;
- and any additional documents specified in the official call for applications.

The final and exact list of required documents is published in the official call for applications for each admission cycle.

8.10 Number of Admitted Students

The maximum number of admitted students is set at **twenty (20)** per academic year. According to the Regulations, this number is considered academically manageable and appropriate in relation to the number of instructors, the student-to-instructor ratio, the material and technical infrastructure, the use of online learning platforms, and the objective of providing high-quality postgraduate academic services.

In addition to these admissions, the Regulations also provide that **one member per year from each partner university** from the categories **EEP**, **EDIP**, and **ETEP** may be admitted, provided that their work is related to the subject of the programme. The Regulations further state that **IKY scholarship holders** and foreign scholarship holders

of the Greek and Lithuanian state in the same or a related field may be admitted without examinations.

8.11 Equal Scores and Additional Admissions Provisions

The Regulations provide that candidates with **equal scores** may be admitted at a rate of **30% of the maximum number of admissions**.

This provision ensures flexibility and fairness in cases where final rankings produce ties among qualified applicants.

8.12 Enrolment Status of Admitted Students

A distinctive feature of the programme is that each admitted student is formally enrolled as a student at **both Klaipėda University and the University of Ioannina** for the full duration of their studies. This provision, explicitly stated in the Regulations, reflects the joint character of the degree and ensures access to the academic framework and student status of both institutions.

8.13 Admission Principles and Programme Fit

The admission and selection process is designed not only to identify academically qualified candidates, but also to ensure that admitted students are well matched to the programme's profile. Because the Joint International Master's combines **Educational Sciences, AI in education, digital learning, gamification, research methodology, and pedagogical competence**, the selection criteria favour candidates who demonstrate both academic readiness and a clear motivation to engage in interdisciplinary postgraduate study.

9. Structure and Duration of the Programme

9.1 General Structure of the Programme

The Joint International Master's Programme **AI for Digital Learning and Gamification** is structured as a **90 ECTS** postgraduate programme organised over **three academic semesters** in its full-time mode. According to the Joint International Master's Regulations, the educational work is organised in semesters, and the total number of credit units required for successful completion of the programme is **90 ECTS**.

The programme follows a clear progression from taught coursework to independent postgraduate research. The first two semesters are devoted to taught modules, while the third semester is devoted entirely to the **Master's Thesis**. This structure supports the gradual development of theoretical understanding, methodological competence, applied skills, and research capacity.

9.2 Duration of Studies

9.2.1 Full-Time Study

The duration of **full-time study** is **three (3) semesters**, including the time required for the preparation and submission of the **Master's Thesis**. The Regulations explicitly provide that in each semester full-time students accumulate **thirty (30) credit units**, leading to a total of **90 ECTS** across the programme.

9.2.2 Part-Time Study

The programme also provides for a **part-time mode of study**. According to the Regulations, the duration of part-time study is **six (6) semesters**. Part-time study is available upon a reasoned application by the student and approval by the **Programme Study Committee**.

9.2.3 Maximum Duration of Study

The Regulations further specify the maximum duration of study. For full-time students, the maximum duration shall not exceed **six (6) semesters**. For part-time students, the maximum duration shall not exceed **eight (8) semesters**.

These provisions ensure academic flexibility while preserving the overall coherence and timely completion of the programme.

9.3 Academic Calendar and Programme Start

The programme begins in the **first semester of each academic year**. The Joint International Master's Regulations provide that, before the start of each academic year, the **Programme Study Committee** adopts a **unified academic calendar** for the programme, taking into account the academic calendars of both the **University of Ioannina** and **Klaipėda University**.

This unified calendar is particularly important for a joint programme, as it supports coordination between the partner institutions and ensures consistency in teaching periods, examinations, and thesis-related academic procedures.

9.4 ECTS Distribution

The programme consists of **90 ECTS** distributed as follows:

- Semester 1: 30 ECTS
- Semester 2: 30 ECTS
- Semester 3: 30 ECTS

The taught component of the programme therefore amounts to **60 ECTS**, while the **Master's Thesis** accounts for the remaining **30 ECTS**.

This distribution reflects the programme's dual orientation toward both structured coursework and independent postgraduate research.

9.5 Semester-by-Semester Structure

9.5.1 First Semester

The first semester provides the conceptual and methodological foundations of the programme. It includes the following courses:

- 1.1 Digital Education and Cultures - 6 ECTS
- 1.2 Research Methodology in Education - 6 ECTS
- 1.3 Digital Skills and Social Media - 6 ECTS
- 1.4 AI-Powered Content Creation & Smart Educational Technologies - 6 ECTS
- 1.5 Digital Pedagogy and Language in Digital Contexts - 6 ECTS

These courses establish the foundations of digital education, educational research, digital literacy, smart educational technologies, and digital pedagogy.

9.5.2 Second Semester

The second semester develops the applied and more advanced dimensions of the programme. It includes the following courses:

- 2.1 AI and Gamification in Education - 6 ECTS
- 2.2 AI in Learning Design, Analytics, and Decision-Making - 6 ECTS
- 2.3 Internet Safety - AI Ethics - 6 ECTS
- 2.4 Systemic Studies and Applications of Gamification - 6 ECTS
- 2.5 Human-Machine Interaction and Virtual Assistants - 6 ECTS

These courses strengthen students' ability to work with AI-supported educational design, learning analytics, ethical technology use, gamification systems, and human-machine interaction in educational contexts.

9.5.3 Third Semester

The third semester is devoted entirely to:

- 3.1 Master's Thesis - 30 ECTS

This final semester enables students to undertake independent postgraduate research within the thematic scope of the programme and to demonstrate the integration of their knowledge, skills, pedagogical competence, and methodological training.

9.6 Logic of Progression Through the Programme

The structure of the programme reflects a clear academic progression.

The **first semester** introduces the theoretical, pedagogical, and methodological foundations required for advanced study in digital education and AI-supported learning. The **second semester** develops more specialised and applied competences in areas such as gamification, analytics, internet ethics, and virtual assistants. The **third semester** culminates in the **Master's Thesis**, through which students conduct independent research and demonstrate academic maturity and professional readiness.

This progression ensures coherence between curriculum design, intended learning outcomes, and the graduate profile of the programme.

9.7 Part-Time Study Provisions

Part-time study is not automatic but is available upon **reasoned application** by the student and approval by the **Programme Study Committee**. According to the Regulations, the following categories of students may apply for part-time study:

- students who demonstrably work at least **20 hours per week**;
- students with disabilities and special educational needs;
- students with serious family reasons;
- students who are also **athletes** and meet the conditions specified in the Regulations;
- and, where applicable, students who fall under additional grounds recognised under the national legislation of either partner country.

The Programme Study Committee evaluates each application on its merits and communicates its decision within **thirty (30) days** of submission.

9.8 Temporary Suspension of Studies

The Regulations also provide for the possibility of **temporary suspension of studies**. Students who have not exceeded the maximum duration of study may, upon reasoned application to the **Programme Study Committee**, suspend their studies for a period not exceeding a total of **two academic semesters**.

Suspension may be granted for serious reasons, including:

- illness;
- pregnancy and childcare;
- military service;
- and other serious reasons such as confinement, absence abroad, or serious family circumstances.

If the study conditions (e.g., programme structure or content) change during the period of suspension, the returning student shall continue their studies in accordance with the updated programme. Any additional academic or administrative requirements shall be fulfilled in accordance with the applicable regulations of the partner institutions.

During the suspension period, participation in educational activities is not permitted, and the suspended semesters are **not counted** toward the maximum duration of study.

Students may also apply for early return from suspension under the conditions specified in the Regulations.

9.9 Extension of Studies

An extension beyond the maximum duration of study is possible for **exceptional family or health reasons**, upon a reasoned application by the student and approval by the **Programme Study Committee**. According to the Regulations, the duration of the extension may not exceed the **minimum number of semesters of regular study** of the programme.

This provision introduces a degree of flexibility while preserving the academic integrity and completion framework of the programme.

9.10 Flexibility and Curriculum Renewal

The structure of the programme is stable, but the curriculum may be revised on an annual basis. The Regulations state that the study programme may be reformed annually in order to renew the curriculum, follow current developments in the field, and make optimal use of the available teaching staff. The **Coordinating Committee** prepares a plan for modification of the study programme and submits it for approval to the **Programme Study Committee**.

This provision ensures that the programme remains academically current and responsive to developments in artificial intelligence, digital learning, educational innovation, and related research fields.

9.11 Overall Structural Profile of the Programme

The structure and duration of the Joint International Master's reflect its identity as an **intensive, research-oriented, and professionally relevant** postgraduate programme. Its three-semester organisation, balanced ECTS distribution, provision for full-time and part-time study, and regulated flexibility through suspension and extension mechanisms all contribute to a coherent academic framework.

At the same time, the programme's structure is closely aligned with its pedagogical and academic aims: it supports the development of advanced knowledge, methodological competence, applied skills, and independent research capacity in a clearly sequenced and internationally coordinated format.

10. Curriculum Overview and Course Structure

10.1 Curriculum Design

The curriculum of the Joint International Master's Programme **AI for Digital Learning and Gamification** is designed as a coherent postgraduate course of study that combines **Educational Sciences, digital learning, artificial intelligence, gamification, research methodology, and pedagogical competence**. Its structure reflects the programme's interdisciplinary character and its aim to combine theory, research, ethical reflection, and practical application in contemporary educational contexts.

According to the Joint International Master's Regulations, the study programme includes compulsory educational and research activities, clearly defined in terms of semester placement, course titles, and ECTS allocation. The curriculum is structured over **three semesters** and corresponds to a total of **90 ECTS**.

The first two semesters consist of taught courses, while the third semester is devoted entirely to the **Master's Thesis**. This structure supports a gradual progression from foundational knowledge and methodological preparation to more advanced applications and finally to independent postgraduate research.

10.2 Curriculum Overview by Semester

10.2.1 Semester 1

Course Code	Course Title	ECTS
1.1	Digital Education and Cultures	6
1.2	Research Methodology in Education	6
1.3	Digital Skills and Social Media	6
1.4	AI-Powered Content Creation & Smart Educational Technologies	6
1.5	Digital Pedagogy and Language in Digital Contexts	6
	Total	30

10.2.2 Semester 2

Course Code	Course Title	ECTS
2.1	AI and Gamification in Education	6
2.2	AI in Learning Design, Analytics, and Decision-Making	6
2.3	Internet Safety - AI Ethics	6
2.4	Systemic Studies and Applications of Gamification	6
2.5	Human-Machine Interaction and Virtual Assistants	6
	Total	30

10.2.3 Semester 3

Course Code	Course Title	ECTS
3.1	Master's Thesis	30
	Total	30

10.3 Course Structure and Academic Logic

The curriculum has been designed to reflect a clear academic sequence.

The **first semester** introduces the conceptual and methodological foundations of the programme. It familiarises students with digital education, educational research, digital competences, smart educational technologies, and digital pedagogy. In this way, it creates the theoretical and methodological basis necessary for more advanced study in later stages of the programme.

The **second semester** develops the more applied and specialised dimensions of the programme. It focuses on the educational uses of AI and gamification, the role of AI in learning design and analytics, internet safety and AI ethics, systemic approaches to gamification, and human-machine interaction. This semester strengthens the programme's practical, analytical, and ethically informed orientation.

The **third semester** is devoted entirely to the **Master's Thesis**, enabling students to undertake independent postgraduate research within the thematic scope of the programme and to integrate the knowledge, research methods, pedagogical understanding, and critical judgement acquired during the taught part of the curriculum.

10.4 Taught Component of the Programme

The taught component of the programme comprises **ten compulsory courses**, all of which carry **6 ECTS** each, giving a total of **60 ECTS**. The curriculum does not include elective courses; instead, it is built around a common and coherent set of compulsory modules that all students are required to complete successfully.

This structure supports the joint and integrated character of the programme, ensuring that all graduates share a common academic foundation in the core subject areas of the degree.

10.5 Thesis Component

The **Master's Thesis** constitutes the final component of the curriculum and carries **30 ECTS**. It represents a substantial part of the programme and confirms its strong research orientation. According to the Joint International Master's Regulations, the thesis must be individual, original, research-based, and aligned with the thematic scope of the programme. It is written in **English**, with an extended abstract in **Greek** and **Lithuanian**.

The thesis allows students to demonstrate their ability to conduct independent research and to apply the theoretical, pedagogical, and methodological knowledge gained during the programme to a focused academic topic.

10.6 Short Course Descriptions

10.6.1 Digital Education and Cultures

This course covers fundamental theoretical paradigms and research on the impact of educational digital platforms on identity, community, and communication. Students explore how digital technologies shape cultural practices and learning environments. Through their own projects students critically evaluate the connection between digital spaces, learning, teaching and culture.

10.6.2 Research Methodology in Education

This course covers fundamental research methodology concepts for education professionals. The curriculum includes research design, question formulation, and methodology selection across both qualitative and quantitative approaches. Students learn various data collection methods including surveys, interviews, observations, and document analysis. The course addresses ethical considerations in research and introduces relevant statistical concepts for educational studies. Participants develop skills to critically evaluate existing research and design their own studies in educational contexts.

10.6.3 Digital Skills and Social Media

This course covers essential digital competencies, including foundational digital skills, online communication, safety, and responsible digital citizenship, while introducing students to content creation, social media platforms, and strategic content planning.

Students also learn digital marketing fundamentals, social media analytics, influencer dynamics, and media literacy, applying these skills in a final data-driven, ethically grounded practical project.

10.6.4 AI-Powered Content Creation & Smart Educational Technologies

This course covers AI-based pedagogical content creation, personalized and adaptive learning systems, virtual assistants, learning analytics, digital wellbeing, and ethical considerations in smart education.

10.6.5 Digital Pedagogy and Language in Digital Contexts

This course covers key topics such as digital literacies, language use in online spaces, multimodal learning, and the design of digital language lessons. It also explores communication, collaboration, assessment, accessibility, and the role of social media and emerging technologies in contemporary language education.

10.6.6 AI and Gamification in Education

This course covers areas of game dynamics, aesthetics, mechanics, theories and research findings on the challenges and benefits of applying gamification in the learning process. Ethical considerations, analytics, design and prototyping are covered. The course ends with students' own creative playtesting.

10.6.7 AI in Learning Design, Analytics, and Decision-Making

This course covers the application of artificial intelligence across three integrated areas: learning design, learning analytics, and data-driven decision-making. Students explore AI foundations, instructional design and learning experience design (LXD), AI in teaching practice, ethical and policy considerations, data literacy, predictive and prescriptive analytics, AI-supported educational leadership, and project-based integration of course concepts. Through lectures, seminars, labs, and group projects, students gain hands-on experience with AI tools and develop the capacity to make evidence-based educational decisions.

10.6.8 Internet Safety - AI Ethics

This course covers the contemporary threat landscape, basic cyber hygiene practices, authentication and device security, as well as key principles of privacy protection including GDPR, data classification, consent, and retention policies. It also explores ethics, fairness and bias, transparency, content integrity and deepfake detection, as well as incident response, digital wellbeing, and policy development through case studies and practical exercises.

10.6.9 Systemic Studies and Applications of Gamification

This course covers the fundamental principles of systems thinking, system behavior, and system dynamics, as well as methods such as dynamic simulation modelling and their use in educational and digital learning environments. It also explores the integration of systems thinking with business and innovation through topics such as gamification business models, the Business Model Canvas, EdTech markets, and the commercialization of AI and digital learning technologies.

10.6.10 Human-Machine Interaction and Virtual Assistants

This course covers core HMI concepts, cognition and UX principles, pedagogical conversational agents, multimodal interaction technologies, prototyping and evaluation methods, and ethical considerations in AI-supported learning environments.

10.6.11 Master's Thesis

The Master's Thesis is the final and most substantial academic component of the programme. It is an individual, original, and research-based piece of postgraduate work through which students demonstrate their ability to identify a focused topic, formulate research questions, engage critically with the relevant literature, select and justify an appropriate methodology, analyse findings, and develop academically grounded conclusions within the thematic scope of the programme.

The thesis should be clearly related to the academic fields of the Joint Master's, including digital education, artificial intelligence in education, gamification, learning design, analytics, ethics, and related areas in Educational Sciences. Its structure is expected to follow the conventions of academic research writing and normally includes introductory elements, a main body consisting of the theoretical and empirical or analytical parts of the study, and appendices where needed. Through the preparation, submission, and public defence of the thesis, students demonstrate not only research competence and academic maturity, but also pedagogical judgement and the ability to contribute meaningfully to innovation in contemporary education.

10.7 Weekly Teaching Load

The Joint International Master's Regulations state that the **academic hours per course per week are four (4)**. This applies to the taught courses of the curriculum and should be understood within the wider framework of postgraduate study, which also includes independent study, assignment preparation, collaborative work, digital engagement, and assessment activities corresponding to the allocated ECTS.

10.8 Curriculum Coherence and Thematic Axes

The curriculum is academically coherent because it is organised around a set of interrelated thematic axes, including:

- Digital Education and Digital Cultures;
- Educational Research and Methodology;
- Digital Skills and Social Media;
- Artificial Intelligence in Education;
- Digital Pedagogy;
- Gamification and Learner Engagement;
- Learning Design and Learning Analytics;
- Internet Safety and AI Ethics;
- Human-Machine Interaction;
- Independent Postgraduate Research.

These thematic axes reflect the academic identity of the programme and ensure alignment between the curriculum, the programme objectives, the intended learning outcomes, and the graduate profile.

10.9 Curriculum Renewal

The Joint International Master's Regulations provide that the study programme may be reformed on an annual basis for the purpose of renewing the curriculum, following developments in the field, and ensuring the best possible use of the available teaching

staff. The **Coordinating Committee** prepares a plan for the modification of the curriculum and submits it to the **Programme Study Committee** for approval.

This provision is especially important in a field characterised by rapid developments in artificial intelligence, digital learning, and educational technologies.

10.10 Concluding Perspective

The curriculum of the Joint International Master's is designed as a coherent, research-oriented, and professionally relevant programme of study. Its structure supports the acquisition of advanced knowledge, pedagogical competence, methodological expertise, ethical awareness, and independent research capacity in a clearly sequenced and internationally coordinated framework.

11. Teaching and Learning Methods

11.1 General Teaching and Learning Approach

The Joint International Master's Programme **AI for Digital Learning and Gamification** adopts a teaching and learning approach that combines academic rigor, pedagogical purpose, digital innovation, and research orientation. Its educational design reflects the interdisciplinary nature of the programme and its aim to connect **Educational Sciences, artificial intelligence, digital learning, gamification, and pedagogical competence** within a coherent postgraduate framework.

The programme is designed not only to transmit specialised knowledge, but also to support students in developing critical understanding, methodological competence, applied educational skills, and the ability to work in digitally mediated and international learning environments. In line with the Joint International Master's Regulations, the programme combines **theory and practice** and prepares students to create interactive, engaging, and personalised educational scenarios with the support of AI and ICT.

11.2 Mode of Delivery

According to the Joint International Master's Regulations, the programme is delivered through synchronous distance learning methods designed to ensure effective pedagogical planning and interactivity. The Regulations also specify that, in addition to remotely delivered courses, each course includes at least eight academic hours (45 minutes each) of direct (in-person) contact work.

This means that the programme follows a digitally supported and interactive teaching model that allows students to participate in real-time academic activities while also benefiting from forms of in-person academic engagement. The structure is consistent with the joint and international nature of the degree and supports participation across institutional and geographical boundaries.

11.3 Digital Learning Platforms and Infrastructure

The Joint International Master's Regulations specify that the material and technical infrastructure supporting distance education is based on **Microsoft Teams** (for synchronous learning) and **E-COURSE** platforms (for asynchronous learning). They also note that the teaching staff possess the required digital skills to support this mode of delivery.

Moreover, Klaipėda University will provide a **Virtual Learning Environment (VLE)** for additional support for academic activities regarding communication, assignments, mentoring, and the observation of student activity. This complements the digital learning environment of the programme and strengthens its capacity for online interaction, supervision, and academic support, according to the needs of the tutors.

Together, these platforms support synchronous and asynchronous activities:

- online teaching;
- distribution of learning materials;
- assignment submission and feedback;

- academic communication;
- mentoring and supervision;
- and participation in a joint digital learning environment.

In addition to Microsoft Teams, E-COURSE, and the complementary Virtual Learning Environment (VLE), the programme provides students with access to a wider set of online academic services that support teaching, learning, communication, supervision, and assessment. These services include application and document sharing, discussion spaces and chat functions for communication among students and between students and lecturers, electronic whiteboard tools, assignment submission and feedback functions, and structured digital spaces for course organisation and mentoring. The digital environment also supports the uploading of educational materials such as notes, presentations, exercises and activities with feedback, sample solutions, and, where appropriate and legally permitted, multimedia and interactive educational content. In line with the international character of the programme, the digital environment should be fully supported in English and should operate within an accessibility-oriented framework for students with disabilities and/or special educational needs.

11.4 Teaching Methods

The teaching methods of the programme are shaped by its subject matter and by its postgraduate character. While the Joint International Master's Regulations do not present a long formal list of teaching methods, the structure of the curriculum and the design of the educational process clearly support a combination of synchronous and/or asynchronous activities:

- **lectures** and structured academic presentations;
- interactive online sessions;
- guided discussion and critical reflection;
- independent study;
- assignment-based learning;
- research-oriented learning;
- digitally supported collaboration;
- and **supervised academic work** leading to the Master's Thesis.

Because the programme focuses on AI in education, gamification, learning design, internet ethics, and human-machine interaction, its teaching methods are expected to encourage both theoretical engagement and the applied exploration of contemporary educational technologies and practices.

11.5 Learning Methods and Student Engagement

The programme's learning approach is student-centred and requires active participation by students in both the taught and research components of the degree. Students are expected not only to attend synchronous sessions, but also to engage critically with the academic content, contribute to discussions, complete written and group assignments, and participate in research and thesis-related activities.

The Joint International Master's Regulations explicitly provide that each student has a **supervisor during their postgraduate studies**, assigned by the programme committee to supervise the student during the online learning process. This supervision contributes

to sustained student engagement and supports academic progression in a digitally mediated learning environment.

The learning experience of the programme is therefore based on a combination of synchronous and/or asynchronous:

- structured teaching;
- active student participation;
- guided academic support;
- continuous engagement with digital learning tools;
- and increasing autonomy, especially in the research phase of the programme.

Across the taught component of the programme, student engagement may also be strengthened through short applied learning tasks, including Microlearning Presentations and structured reflection activities. These are used to support the pedagogically meaningful use of AI tools, digital applications, and technology-enhanced techniques in applied educational activities. In this way, students are encouraged not only to study digital and AI-supported pedagogy conceptually, but also to demonstrate, reflect on, and critically evaluate its use in practice.

11.6 Interactivity and Pedagogical Design

A particularly important feature of the programme is the emphasis placed on **interactivity** and **pedagogical design**. The Regulations expressly state that synchronous distance education must be organised in a way that ensures proper pedagogical design and interactivity. This is highly significant, because it shows that the programme is not based on passive online transmission of content, but on a pedagogically structured model of digital postgraduate education.

This is fully consistent with the academic subject of the programme itself. Since the programme deals with digital pedagogy, AI-enhanced learning, gamification, and human-machine interaction, the methods through which the programme is taught should reflect the very principles that it studies: meaningful design, learner engagement, critical use of digital tools, and pedagogical coherence.

11.7 Theory-Practice Integration

The programme is based on a clear integration of **theory and practice**. The Joint International Master's Regulations explicitly describe it as an innovative study programme that combines theory and practice. They also state that students are trained using modern AI and ICT technologies in order to create educational learning scenarios with interactive, engaging, and personalised activities.

This principle is reflected across the curriculum:

- foundational and theoretical understanding is developed in courses such as **Digital Education and Cultures** and **Research Methodology in Education**;
- applied and design-oriented competences are strengthened in courses such as **AI-Powered Content Creation & Smart Educational Technologies**, **AI in Learning Design**, **Analytics**, and **Decision-Making**, and **AI and Gamification in Education**;
- ethical and critical dimensions are addressed through **Internet Safety - AI Ethics**;
- and the integration of all these dimensions culminates in the **Master's Thesis**.

11.8 Research-Oriented Learning

Research is a central component of the programme's teaching and learning philosophy. The curriculum includes a dedicated course in **Research Methodology in Education**, and the final semester is devoted to the **Master's Thesis**, which carries **30 ECTS** and requires students to undertake independent postgraduate research.

The Joint International Master's Regulations also state that the programme aims to strengthen the quality of higher education through the development of human research potential and to contribute to research activity, including the preparation of scientific papers within the framework of the programme.

Teaching and learning in the programme are therefore not limited to content acquisition; they are also intended to cultivate academic inquiry, critical interpretation, methodological discipline, and the ability to formulate and investigate educational questions through research.

11.9 English-Medium and International Learning Environment

The programme is delivered in **English**, as explicitly stated in the Joint International Master's Regulations. This makes English the common academic language of teaching, learning, collaboration, and research throughout the programme.

As a result, the programme also functions as an **international learning environment**, in which students are expected to communicate, collaborate, and develop academically in an English-medium context shared by two partner universities from different countries. This international dimension is reinforced by the joint governance of the programme, the involvement of both institutions, and the broader European orientation of the partnership.

11.10 Teaching Load and Study Expectations

The Joint International Master's Regulations state that the **academic hours per course per week are four (4)** (teaching and seminar/field work). However, as in all postgraduate programmes organised through ECTS, the total student workload also includes independent study, reading, preparation of assignments, participation in synchronous sessions, collaborative work, and research-related activity.

Accordingly, the programme expects students to manage their study time responsibly and to engage continuously with the academic material throughout the semester rather than relying only on final examination preparation.

11.11 Teaching and Learning in Relation to the Graduate Profile

The teaching and learning methods of the programme are closely aligned with the intended graduate profile. They are designed to support the development of:

- advanced disciplinary knowledge;
- pedagogical competence;
- research ability;
- ethical awareness;
- digital and AI-related educational expertise;

- and the capacity to work in international and interdisciplinary academic settings.

In this sense, the programme's teaching methods are not simply a technical means of delivering content. They are an integral part of the programme's identity as a joint, digital, pedagogically grounded, and research-oriented Master's degree.

11.12 Concluding Perspective

The teaching and learning methods of the Joint International Master's reflect the programme's broader academic philosophy: they combine synchronous digital delivery, interactivity, supervision, theory-practice integration, and research-oriented learning within a jointly coordinated international framework.

This approach supports a rich postgraduate learning experience in which students are expected to participate actively, think critically, engage ethically, and develop the knowledge, skills, and pedagogical competence necessary for the future of digital education and AI-supported learning.

12. Assessment, Examinations and Grading System

12.1 General Principles of Assessment

Assessment in the Joint International Master's Programme **AI for Digital Learning and Gamification** is designed to evaluate student achievement in a manner consistent with the programme's academic aims, learning outcomes, and postgraduate character. According to the Joint International Master's Regulations, the methods of assessing student progress are determined by the instructor, who may organise **written and/or oral examinations**, require **written assignments** (individual or group), require **assignment presentations**, or apply a combination of these methods.

The Regulations further state that assessment may be based either on a **comprehensive final examination** or on a **combination of partial assessments** of equal or different weight. This allows the programme to combine summative and formative approaches to assessment in ways appropriate to the nature of each course.

Assessment is therefore not limited to the reproduction of knowledge, but is intended to evaluate students' ability to analyse, apply, interpret, design, and critically reflect on issues related to digital learning, artificial intelligence, gamification, pedagogy, and educational research.

12.2 Forms of Assessment

The Joint International Master's Regulations provide for both formative and summative assessment. They state that, at the level of individual study subjects, a variety of assessment methods may be applied, such as written examinations, individual assignments, and group assignments. The specific assessment methods and their weightings are defined in each course description; the following distribution of assessment components may be applied:

- online written examinations: 30%;
- individual assignment: 40%;
- group assignment: 30%.

This assessment model reflects the educational philosophy of the programme by combining:

- individual academic work;
- collaborative learning and group-based production;
- and more formal examination procedures.

The use of assignments and presentations is also consistent with the programme's emphasis on research-oriented learning, applied educational design, digital engagement, and pedagogical competence.

12.3 Course-Level Assessment Responsibility

Responsibility for the design and implementation of assessment lies with the **instructor of each course**. The Regulations specify that the instructor determines the method of assessment and is responsible for ensuring the integrity of the process where written or oral examinations are used.

This means that while the overall assessment framework of the programme is regulated, instructors retain pedagogical responsibility for selecting and implementing appropriate course-level assessment methods within that framework.

12.4 Conditions for Participation in Assessment

The Joint International Master's Regulations provide that attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. They also state that students may participate in examinations only if they have submitted their independent assignments and received positive evaluations.

This provision reflects the integrated nature of the programme's teaching and assessment model. Assessment is linked not only to final testing, but also to sustained engagement with coursework, active participation, and the satisfactory completion of required academic tasks.

12.5 Examination Periods

For courses in which assessment includes a final written and/or oral examination, the Regulations provide for the following examination periods:

- the first examination period, which takes place after the completion of first-semester courses (January-February) and after the completion of second-semester courses (June);
- the second (repeat) examination, if needed, takes place in September.

The detailed examination schedule is determined by the Programme Study Committee at the beginning of each academic year, taking into account the academic calendars of both partner universities.

This arrangement supports academic coordination in the context of a joint international programme while ensuring predictable assessment periods for students.

12.6 Remote and Alternative Assessment

Because the programme is organised through synchronous distance education, the Regulations explicitly provide that final examinations may be conducted remotely, provided that the integrity, reliability, and transparency of the assessment process are ensured. Remote online examinations and assessments are implemented in accordance with Ministerial Decision No 18137/Z1/2023, Article 6, and through institutional or institutionally approved digital platforms that support secure access, user authentication, identity verification, monitoring where necessary, and the protection of personal data. Students may be required to confirm their identity through the presentation of a valid identification document and access to the examination platform through their institutional academic account.

They also provide that, in cases of force majeure or emergency conditions, alternative assessment methods may be used, including written or oral examinations conducted through electronic means, again subject to the condition that academic integrity is safeguarded.

In addition, where force majeure, illness, or recovery from serious illness affects a student, the instructor is advised to facilitate the student by appropriate means, such as remote oral examination or examination at a later date. During oral examinations, the Regulations specify that the instructor must ensure that they are not alone with the student being examined; the presence of another instructor is required.

Remote assessment in the programme may include timed online examinations, open-book examinations, oral examinations conducted through video conferencing, online quizzes, and other digitally mediated forms of assessment appropriate to the intended learning outcomes of each course. In online assessment contexts, students are expected to use the required digital platforms and to ensure access to a stable internet connection, webcam, and microphone where necessary. Prior to major online examinations, students may be provided with technical guidance and, where appropriate, mock examination opportunities to familiarise themselves with the digital examination environment. Alternative arrangements may be made in justified cases, including for students with disabilities, special educational needs, or documented connectivity difficulties, in accordance with the relevant programme and institutional procedures.

In order to reduce opportunities for misconduct while better assessing higher-order learning outcomes expected at Master's level, remote online examinations may include webcam monitoring and screen recording where necessary and permitted, institutionally approved secure examination tools where required and available, question randomisation, different questions or question order for each student, strict time constraints, and plagiarism detection software such as Turnitin.

All remote online examinations and remote assessments are implemented through institutional or institutionally approved digital platforms. Their use follows the principles of reliability, academic integrity, confidentiality, data protection, and cybersecurity, in accordance with Ministerial Decision No 18137/Z1/2023, the GDPR, Law 4624/2019, and the applicable policies of the partner universities.

12.6.1 Privacy, Data Protection, Confidentiality and Cybersecurity in Remote Assessment

Students are informed in advance, in a clear and accessible manner, about the categories of data that may be collected and processed during remote online examinations, the purposes of processing, the possible use of recordings where applicable, data retention periods, access rights, and the safeguards applied to protect personal data.

The processing of personal data during remote online examinations is carried out in a manner that ensures an appropriate level of security against risks such as accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, personal data transmitted, stored, or otherwise processed.

Teaching staff, invigilators, members of examination committees, platform administrators, and any persons providing technical and/or administrative support during remote online examinations are bound by confidentiality obligations. They may access examination-related data, recordings, logs, identification records, submissions, similarity reports, and any other examination-related information only to the extent strictly necessary for the organisation, supervision, verification, grading, technical support, quality assurance, or integrity review of the examination procedure.

Access to such data is role-based, limited to authorised users, and, where technically supported, logged and monitored in accordance with the applicable institutional information-security and cybersecurity policies. Examination data are stored securely and retained only for the period required by the applicable institutional regulations and examination/appeals procedures.

12.7 Grading Scale

The Joint International Master's Regulations state that student performance in each course and in the Master's Thesis is assessed on a grading scale from 0 to 10. Grades may be awarded as whole numbers or numbers rounded to one decimal place. A grade of 5.0 and above is considered a passing grade.

The Regulations also note that the Diploma Supplement includes a description of the grading scale used in the programme, together with reference to the grading systems of both partner universities, in order to ensure transparency and facilitate recognition.

12.8 Description of the Grading Scale of the University of Ioannina

The Joint International Master's Regulations provide the following grade descriptors for the **University of Ioannina**:

- **8.5 - 10.0:** Excellent
- **6.5 - 8.4:** Very Good
- **5.0 - 6.4:** Good
- **0 - 4.9:** Fail

These descriptors support the interpretation of course and final grades within the Greek institutional framework.

12.9 Description of the Grading Scale of Klaipėda University

The Joint International Master's Regulations also reproduce the grading framework of **Klaipėda University**, which distinguishes between passed and failed performance levels. According to the Regulations:

Passed

- **10 (excellent):** excellent, exceptional knowledge and skills;
- **9 (very good):** strong, good knowledge and skills;
- **8 (good):** better than average knowledge and skills;
- **7 (average):** average knowledge and skills, with minor errors;
- **6 (satisfactory):** knowledge and skills below average, with errors;
- **5 (weak):** knowledge and skills meet minimum requirements.

Failed

- **4 (unsatisfactory)** and below: minimum requirements not met.

The inclusion of both systems in the academic documentation of the programme reflects the joint nature of the degree and supports transparency for students and external bodies.

12.10 Publication and Correction of Grades

The Regulations provide that examination results must be recorded and published:

- on the day of the assessment for oral examinations; or
- no later than two working days after the assessment for written examinations.

This rule applies uniformly to all courses of the programme, regardless of the partner institution or the academic staff member responsible for the course. If an instructor exceeds this deadline, the Director of the Joint Master's Programme informs the Programme Study Committee.

The Regulations further provide that grade correction is permitted only in cases of obvious error or arithmetic mistake, following written communication from the responsible instructor and a decision of the Programme Study Committee.

12.11 Retention of Examination Material

Written examination materials are retained for the period required by the institutional regulations of the partner universities. After this period, and provided that no criminal, disciplinary, or other administrative proceedings are pending, the papers may be destroyed under the responsibility of the Programme Study Committee, following the drawing up of an appropriate protocol.

This provision supports procedural clarity and academic accountability.

12.12 Degree Grade Calculation

The final degree grade is calculated as the sum of the products of each course grade by the corresponding ECTS, divided by the total number of ECTS. According to the Regulations, the concept of "course" includes all types of educational and research activities to which ECTS credits are awarded, including the Master's Thesis.

This means that the final degree classification reflects the student's weighted performance across the full academic structure of the programme.

12.13 Academic Integrity in Assessment - use of genAI

The Joint International Master's Regulations place particular emphasis on the integrity of assessment procedures. Instructors are required to ensure the integrity of written and oral examinations, including in remote assessment settings. The Regulations also include separate provisions on **plagiarism** and academic ethics, making clear that postgraduate students are obliged to declare the use of the work, ideas, and **AI tools** of others, and that copying and plagiarism constitute serious academic offences.

They specify that plagiarism includes both the copying of another person's work and the use of published or unpublished material without proper attribution. Violations are referred to the **Coordinating Committee** for assessment and recommendation and may lead to disciplinary consequences under the relevant provisions of the programme regulations.

The use of Artificial Intelligence (AI) tools, including systems for generating text, images, code, or other forms of digital content, is permitted within the framework of

the master's Programme, provided that such tools support learning, research, and academic development and do not replace the student's own intellectual work.

Students may use AI tools for purposes such as information retrieval, idea generation, content organization, language editing, educational material development, data analysis, and other activities aligned with the learning objectives of the course.

Any use of AI tools in assignments, projects, case studies, research reports, dissertations, or other forms of assessment **must be explicitly declared** by the student. Such declaration should include the AI tool(s) used, the purpose of their use, and the extent to which AI contributed to the final submission.

Students retain full responsibility for the accuracy, validity, originality, ethical use, and academic integrity of all submitted work. The submission of AI-generated content as one's own work without appropriate acknowledgement, critical evaluation, or substantial intellectual contribution constitutes a breach of academic integrity and may be subject to disciplinary procedures in accordance with the University's regulations.

Course instructors may establish additional requirements, restrictions, or conditions regarding the use of AI tools, depending on the nature, learning outcomes, and assessment methods of the course. These requirements shall be clearly communicated to students at the beginning of the course.

The use of AI tools during written, oral, or online examinations is prohibited unless explicitly authorized by the course instructor and specified in the examination guidelines. Where AI use is permitted, students must comply with the conditions established for the specific assessment activity.

The Programme encourages the responsible, ethical, and transparent use of Artificial Intelligence technologies as learning and research support tools while maintaining the principles of academic integrity, critical thinking, independent scholarship, and intellectual responsibility.

12.14 Accessibility and Equal Access in Assessment

The Regulations explicitly state that all assessment methods must take into account the possibility of **equal access** for all students to the necessary means. For students with **disabilities** and/or **special educational needs**, an **alternative examination protocol** may be applied in accordance with the guidelines of the **Equal Access Unit of the University of Ioannina** and the **Klaipėda University Policy on Disability and Inclusion**.

This provision is consistent with the inclusive and student-centred philosophy of the programme. Flexible time windows may be provided for students with documented educational needs, disabilities, special educational needs, or connectivity difficulties, where appropriate and in accordance with the applicable institutional procedures. Oral examinations may be recorded only where necessary, where permitted by the applicable institutional regulations, and provided that students are informed in advance about the purpose of the recording, access rights, retention period, and data protection safeguards.

12.15 Concluding Perspective

The assessment, examination, and grading system of the Joint International Master's reflects the programme's identity as a research-oriented, digitally delivered, and pedagogically grounded postgraduate degree. Its framework combines coursework, examinations, individual and group assignments, ethical safeguards, transparent grading, and respect for accessibility and academic integrity.

Through this system, assessment functions not only as a means of certification, but also as an integral part of the learning process, supporting students in developing advanced knowledge, methodological competence, critical judgement, and pedagogical responsibility in the field of digital education and AI-supported learning.

13. Master's Thesis

13.1 Role and Purpose of the Master's Thesis

The **Master's Thesis** is the culminating academic component of the Joint International Master's Programme **AI for Digital Learning and Gamification**. It carries **30 ECTS** and occupies the **third semester** of the programme. It is not simply a final written requirement, but an individual, original, and research-based academic project through which students are expected to demonstrate the knowledge, methodological understanding, critical judgement, pedagogical awareness, and research competence developed during their studies.

The thesis should be clearly situated within the scientific and educational scope of the programme and should address a focused topic related to one or more of its core thematic fields, such as digital education, digital pedagogy, artificial intelligence in education, gamification, learning design, learning analytics, internet safety and AI ethics, human-machine interaction, virtual assistants, and related areas in Educational Sciences. Because the programme combines pedagogy, technology, research, and innovation, the Master's Thesis is expected to reflect not only theoretical understanding, but also the student's ability to formulate meaningful academic questions, select and justify an appropriate research design, analyse and interpret findings, and connect the results to wider educational and pedagogical issues.

In academic terms, the Master's Thesis is expected to have a coherent research structure. As a rule, it includes introductory elements, the main body of the study, and, where appropriate, appendices. The introductory elements normally include the title page, declaration of originality, abstract, extended abstracts, keywords, and tables of contents and figures where relevant. The main body typically includes the introduction, theoretical framework or literature review, research aim and questions and/or hypotheses, methodology, presentation of findings, discussion, conclusions, and, where appropriate, pedagogical implications, limitations, and suggestions for further research. Appendices are optional and should be included only where they serve a clear academic purpose, for example by presenting research tools, supporting materials, or supplementary documentation.

The thesis is also a process of guided academic development. Under the supervision of an appointed supervisor, students are expected to refine their topic, clarify their research aims, identify relevant bibliography, make informed methodological choices, develop the written study progressively, and prepare the final work for examination and public defence. The thesis therefore represents both a final academic product and a sustained process of independent postgraduate work carried out within an international and interdisciplinary academic environment.

Because the thesis occupies the full third semester and carries 30 ECTS, it should be understood as a central pillar of the programme's graduate profile. It provides students with the opportunity to demonstrate that they can produce academically rigorous, ethically responsible, and pedagogically meaningful research in a field shaped by contemporary digital and AI-related developments in education.

13.2 Eligibility to Undertake the Master's Thesis

The Joint International Master's Regulations state that preparation of the Master's Thesis begins **after attendance of all programme courses and successful completion of all examinations**. This provision confirms that the thesis is intended as the final academic stage of the programme and presupposes successful completion of the taught component.

The thesis therefore functions as an advanced research task undertaken once students have acquired the theoretical, methodological, and applied foundations necessary for independent postgraduate research.

13.3 Language of the Thesis

The language of the Master's Thesis is **English**. In addition, the Joint International Master's Regulations require that the thesis include an **extended abstract of 200 words in Greek and Lithuanian**.

This requirement reflects both the international nature of the programme and its binational academic structure, while maintaining English as the common academic language of the degree.

13.4 Thesis Supervision

13.4.1 Appointment of the Supervisor

The Joint International Master's Regulations provide that students are informed about the process of preparing the Master's Thesis during a **seminar event held in the last week of May each year**. Following this, each student submits a request to the Programme Secretariat by **20 September** each year, indicating the proposed supervisor. The **Programme Study Committee** appoints the thesis supervisor, who also recommends the thesis title. While the formal submission and defence of the Master's Thesis require the successful completion of all coursework, the process of topic selection and supervisor appointment may begin earlier in accordance with programme-specific procedures.

This process ensures that supervision is formally assigned within the governance framework of the programme and that thesis topics are academically aligned with the scope of the degree.

13.4.2 Who May Supervise a Thesis

Master thesis supervisors are professors, from the **Department of Early Childhood Education, UoI, or Department of Pedagogy, Klaipėda University, or professors from cooperating departments of both universities, or from other cooperating higher education institution in Greece or abroad** considering that they participate in the programme

Members in the supervising committee, are holding a Phd and are:

- members of Teaching and Research Staff (TRS);
- Emeritus Professors or retired TRS members;
- members of Special Educational Staff (SES);

- members of Laboratory Teaching Staff (LTS);
- members of Special Technical Laboratory Staff (STLS);

This broad supervisory framework supports the interdisciplinary and international character of the programme.

13.5 Thesis Topic and Academic Scope

The Joint International Master's Regulations state that the topic of the Master's Thesis must fall within the **scope of the programme**. This means that thesis topics should be clearly related to the academic fields covered by the curriculum, such as:

- digital education and digital pedagogy;
- artificial intelligence in education;
- gamification in learning;
- learning design and analytics;
- internet safety and AI ethics;
- human-machine interaction and virtual assistants;
- and related themes in Educational Sciences.

Because the thesis is defined as research-based and original, students are expected to formulate a focused academic topic capable of contributing meaningfully to one or more of these thematic areas.

13.6 Examination Committee

The Joint International Master's Regulations provide that the composition of the **five-member Examination Committee** is determined by the **Programme Study Committee** upon recommendation of the supervisor. The Committee must include **at least one member from each partner university**.

The members of the Examination Committee, one of whom is the supervisor, must have the same or a related scientific specialisation as the programme's field of knowledge or be relevant to the subject of the thesis.

This composition reflects the joint academic responsibility of the partner institutions and ensures that thesis assessment is conducted within an appropriately qualified and internationally shared academic framework.

13.7 Submission and Examination Procedure

After the thesis has been completed, the postgraduate student submits it for examination, and it is forwarded to the members of the Examination Committee. If the Committee gives a positive preliminary assessment, the date of the **public presentation and defence** of the thesis is set and announced on the websites of the departments and the Joint Master's Programme.

The public presentation is therefore an integral part of the examination process and reinforces the academic transparency and postgraduate character of the degree.

13.8 Public Presentation and Defence

The Joint International Master's Regulations explicitly provide for a **public presentation/defence** of the Master's Thesis. During this stage, the Examination Committee evaluates:

- the structure and content of the thesis;
- the organisation and development of the topic;
- the presentation and evaluation of methodology and results;
- the bibliography and explanatory elements;
- the quality of the public presentation;
- and the broader scientific competence of the student.

This means that the final assessment of the thesis is based not only on the written text, but also on the student's ability to present and defend the work in an academically rigorous manner.

13.9 Assessment and Outcome

Following the public presentation and evaluation, the Examination Committee drafts and signs a **Public Presentation Report**, which includes any observations or comments as well as the final grade, and submits it for approval to the **Programme Study Committee**.

The thesis is graded on the same **0-10 scale** used elsewhere in the programme, with **5.0 and above** constituting a passing grade, since the Regulations specify that each course, exercise, and the Master's Thesis are graded independently on the programme's grading scale.

13.10 Revision and Re-Submission

The Joint International Master's Regulations also define the procedure in the case of a negative assessment. If the thesis is not approved, the student has the right to **revise and re-submit** it for a second evaluation. The timeframe for re-submission is determined by the **Joint Programme Study Committee**, taking into account the regulations of both partner universities and the academic calendar.

The student is entitled to **only one re-submission**. A second negative assessment results in the student's **removal from the programme**.

This provision underlines both the seriousness of the thesis requirement and the academic standards of the degree.

13.11 Repository Deposit and Archiving

Approved Master's Theses must be deposited in the institutional repositories of both partner universities. The Joint International Master's Regulations state that approved theses are **compulsorily deposited** in the **"OLYMPIAS" Digital Repository** of the University of Ioannina and must also be deposited in the **institutional repository of Klaipėda University**.

This requirement supports academic transparency, institutional archiving, and the dissemination of postgraduate research produced within the programme.

13.12 Thesis and Research Competence

The Master's Thesis is closely linked to the programme's educational philosophy and intended learning outcomes. It gives students the opportunity to demonstrate:

- research competence;
- methodological understanding;
- pedagogical judgement;
- ethical awareness;
- critical engagement with digital and AI-related educational issues;
- and the ability to produce original postgraduate work within an interdisciplinary and international academic environment.

Because the thesis occupies the full third semester and carries 30 ECTS, it should be understood not as an additional academic requirement but as a central pillar of the programme's graduate profile.

13.13 Concluding Perspective

The Master's Thesis is the capstone of the Joint International Master's **AI for Digital Learning and Gamification**. It confirms the research-oriented nature of the programme and provides students with the opportunity to integrate theory, pedagogy, methodology, digital innovation, and independent inquiry in a substantial academic project.

Through its individual nature, formal supervision, public defence, joint examination structure, and repository deposit, the thesis reflects the academic standards, international cooperation, and joint institutional responsibility that define the programme as a whole.

14. Student Rights, Obligations and Academic Conduct

14.1 Student Status and General Rights

Students admitted to the Joint International Master's Programme **AI for Digital Learning and Gamification** are formally enrolled as students at **both Klaipėda University and the University of Ioannina** for the full duration of their studies. This dual enrolment reflects the joint character of the programme and ensures that students are part of the academic framework of both partner institutions.

The Joint International Master's Regulations further state that postgraduate students enjoy all rights and benefits provided to first-cycle students, up to and including the expiry of any granted extension of study, with the exception of the right to free textbooks. The Regulations also state that students of the programme have access to the academic resources, libraries, digital repositories, and student support services of both partner universities throughout their enrolment.

Accordingly, students of the programme are entitled to participate fully in the academic life of the Joint International Master's and to benefit from the educational, digital, and support infrastructures made available by both institutions.

14.2 Academic Advising and Student Support

The Joint International Master's Regulations provide that, by decision of the **Programme Study Committee**, each student is assigned a member of the teaching and research staff who carries out teaching duties in the programme and serves as **Academic Advisor**. The Academic Advisor monitors the academic progress of the postgraduate student during the period of study.

This advisory role is complemented by the wider student support structures of the partner institutions. At the University of Ioannina, the Departmental Study Guide refers to the **Student Support Unit**, the **Equal Access Unit**, the **Counselling Centre**, student welfare services, and structures related to mobility and academic guidance.

At Klaipėda University, the uploaded support material states that students can receive centrally organised and academic-unit-based support on issues such as admissions, careers, study abroad, finance, social support, psychological support, spiritual support, accommodation, and disability-related study adaptation.

Together, these provisions support the programme's student-centred and inclusive academic environment.

14.3 Student Obligations and Academic Participation

The Joint International Master's Regulations make clear that students are expected to participate actively and responsibly in the academic life of the programme. Postgraduate students are required to participate in and attend **research group seminars, bibliographic discussions, laboratory visits, conferences/workshops** related to the programme's field of knowledge, lectures, and other scientific events of the programme.

The Regulations also state that **attendance at lectures, seminars, and field work is compulsory**. Students who fail to meet attendance requirements without a valid reason may not be permitted to take examinations or continuous assessments, or may be subject to other academic consequences as defined in the Regulations. In addition, students may participate in examinations only if they have submitted their independent assignments and received positive evaluations.

Students are therefore expected to engage not only in course attendance and assessment, but also in the broader academic and research culture of the programme.

14.4 Tuition Fees and Financial Obligations

The Joint International Master's Regulations state that tuition fees are set at **€7,000 for full-time study** (for the full duration of the programme). They further provide that for students from **outside the European Union**, tuition fees are **€9,000 per person** (for the full duration of the programme).

Payment of tuition fees is made after completion of the student selection procedure by the competent programme body, in accordance with the founding decision and the applicable regulations. The Regulations also state that postgraduate students must settle all financial obligations before receiving the completion certificate and the Master's Diploma.

In addition, payment of tuition fees is suspended for students who submit an application for exemption until the exemption examination process is completed.

14.5 Scholarships and Tuition Fee Exemptions

The programme includes provisions for both **scholarships** and **tuition fee exemptions**.

The Joint International Master's Regulations provide that the programme awards **exceptional academic performance scholarships** to postgraduate students based on academic performance. These scholarships may include full exemption from tuition fees and, where provided, institutional benefits and/or a monetary amount intended to support students' living expenses during their studies. The number of scholarships is determined each academic year by the **Programme Study Committee**.

The Regulations also provide for **reciprocal scholarships** in exchange for auxiliary teaching work in first-cycle programmes, where applicable.

With regard to tuition fee exemptions, the Regulations state that postgraduate students who, as a priority, meet the conditions of exceptional academic performance in their first-cycle studies and satisfy the applicable economic or social criteria may be exempted from tuition fees, in accordance with the legal framework. The percentage of exempt students is set at **10% to 30%** of admitted students per academic year. Students who receive scholarships from other sources for the same purpose, as well as citizens of non-EU countries, are not entitled to this exemption.

These financial provisions support equal opportunity and academic merit within the framework of the programme.

14.6 Part-Time Study, Suspension and Extension

Students may also have rights to flexibility in the organisation of their studies. The Joint International Master's Regulations provide for **part-time study**, **temporary suspension of studies**, and **extension beyond the maximum duration of study** under specified conditions.

Part-time study is available upon reasoned application and approval by the **Programme Study Committee**, for categories such as working students, students with disabilities or special educational needs, students with serious family reasons, and certain categories of athletes.

Students may also apply for temporary suspension of studies for serious reasons, including illness, pregnancy and childcare, military service, and other serious personal circumstances, subject to the limits and procedures set out in the Regulations. The Regulations also allow, in exceptional cases, an extension beyond the maximum duration of study for family or health reasons.

These provisions indicate that student obligations are accompanied by regulated forms of academic flexibility where justified.

14.7 Academic Conduct and Ethical Responsibility

Students of the Joint International Master's are expected to conduct themselves in accordance with the principles of academic integrity, responsible participation, and respect for the academic rights of others. The Regulations underline that students are members of a joint academic community and are expected to fulfil their obligations in a way consistent with the academic values and institutional frameworks of both partner universities.

This includes compliance with programme regulations, fulfilment of academic obligations, respect for assessment rules, and adherence to the standards of ethical conduct that apply to postgraduate study and research.

14.8 Academic Integrity and Plagiarism

The Joint International Master's Regulations contain detailed provisions on **plagiarism** and academic ethics. They state that postgraduate students submitting coursework or a Master's Thesis are obliged to indicate whether they have used the work, views, or **AI tools** of others.

The Regulations define copying as a serious academic offence and explain that plagiarism includes:

- copying the work of another person;
- using the work of another, whether published or unpublished, without proper attribution;
- and citing supporting material, including from one's own previous work, without proper reference.

Any offence or violation of academic ethics is referred to by the **Coordinating Committee** for assessment and recommendation to the **Programme Study Committee**. The Regulations expressly include copying, plagiarism, and any breach of intellectual

property provisions by a postgraduate student during coursework writing or thesis preparation among the forms of misconduct that may trigger disciplinary action.

These provisions are especially important in a programme dealing directly with digital technologies and AI-supported tools, since they make clear that responsible and transparent use of such tools is an academic obligation.

14.9 Deregistration of the Programme

The Joint International Master's Regulations provide that the **Programme Study Committee**, upon recommendation of the **Coordinating Committee**, may decide to **deregister** postgraduate students under certain circumstances. These include:

- exceeding the maximum permitted absence limit, where this is provided;
- failing a course or courses **three times**;
- exceeding the maximum duration of study in the programme;
- failure to fulfil academic obligations;
- demonstrable violation of the disciplinary provisions of the applicable higher education legislation;
- violation of academic ethics principles, including copying during examinations and plagiarism in assignments;
- violation of the academic rights of other students;
- or submission by the postgraduate student of a personal application for deregistration.

This provision ensures that the programme has a clear framework for responding to serious academic or disciplinary failures.

14.10 Disciplinary Sanctions

The Regulations also provide for disciplinary sanctions in the event of disciplinary offences committed by postgraduate students. Such offences may include plagiarism, breach of examination integrity, misuse of university premises and infrastructure, or other conduct inconsistent with the mission of the institutions.

Possible sanctions include:

- written reprimand;
- prohibition from participation in examinations for one or more semesters;
- temporary or permanent prohibition from the use of institutional facilities;
- or suspension of student status for a period ranging from **one to twenty-four months**.

These provisions underline that academic rights are inseparable from academic responsibilities.

14.11 Complaints and Objections Procedure

The Joint International Master's Regulations establish formal **complaints and objections handling mechanism**. Any complaints or objections regarding programme-related procedures may be submitted electronically to the Secretariat of the department providing administrative support for the programme or through a special form on the programme website.

The Regulations state that complaints are immediately forwarded to the **Programme Director**, who informs and convenes the **Coordinating Committee** while maintaining anonymity, discretion, confidentiality, and personal-data protection. The Director may communicate with the person named in the complaint or convene a meeting with the postgraduate student, the Academic Advisor, and other academic staff where appropriate, in an effort to resolve the issue. If necessary, the matter is referred to the **Programme Study Committee** for further deliberation and decision.

In very serious cases, and where resolution is not achieved, the Director may inform the relevant institutional bodies. If the complaint concerns the Director, the most senior member of the Coordinating Committee handles the process. Complaints should be resolved within **twenty working days**.

This mechanism provides students with a formal route for the fair and confidential handling of concerns.

14.12 Inclusive Access and Student Welfare

The rights and obligations of students on the programme are also defined by the commitment of the partner institutions to ensure inclusion and student well-being. The Joint International Master's Regulations explicitly provide for the accessibility of studies for students with disabilities and/or special educational needs, enabling adaptations to both the study process and assessment methods. Alternative examination arrangements may also be applied in accordance with the relevant institutional guidelines.

This is reinforced by the wider support structures of the partner universities, including counselling, equal access, student welfare, mobility support, housing-related support, and disability-related adaptations.

Accordingly, the programme seeks to balance academic standards and responsibilities with institutional support and equal opportunity.

14.13 Concluding Perspective

The rights and obligations of students in the Joint International Master's are framed by the programme's identity as a joint, international, research-oriented, and digitally delivered postgraduate degree. Students benefit from dual institutional affiliation, academic advising, access to educational and support resources, and regulated opportunities for financial support and study flexibility. At the same time, they are expected to participate actively, fulfil their academic obligations, uphold academic integrity, and respect the rights of others within the programme community.

In this sense, student status on the programme is understood not only as entitlement to academic services and support, but also as participation in a shared academic culture grounded in responsibility, integrity, professionalism, and mutual respect.

15. Mobility and International Dimension

15.1 International Character of the Programme

The Joint International Master's Programme **AI for Digital Learning and Gamification** is, by its nature, an international and collaborative postgraduate degree. It is jointly organised by the **Department of Early Childhood Education, School of Education, University of Ioannina** and the **Department of Pedagogy, Klaipėda University**, and is governed through shared academic bodies involving both institutions. The Joint International Master's Regulations make clear that the programme is a **Joint International Postgraduate Study Programme of International Cooperation**, and that students are formally enrolled at **both partner universities** for the duration of their studies.

Its international dimension is therefore not supplementary but structural. It is reflected in the programme's governance, academic design, degree award, language arrangements, digital learning environment, and quality assurance procedures.

15.2 Joint Academic Cooperation Between the Partner Universities

The programme is built on sustained academic cooperation between the **University of Ioannina** and **Klaipėda University**. The Joint International Master's Regulations define a shared governance model including the **Senates of both universities**, the **Institutional Postgraduate Studies Committee of the University of Ioannina**, the **Educational Sciences Study Program Committee of Klaipėda University**, the **Programme Study Committee**, the **Coordinating Committee**, and the **Director of the Joint Master's Programme**.

This joint governance structure ensures that academic planning, curriculum oversight, quality assurance, and programme development are based on the cooperation of both institutions rather than on unilateral decision-making. The programme's joint character is also reflected in the fact that all ECTS credits earned in the programme are fully and automatically recognised by both partner universities.

15.3 English-Medium International Learning Environment

A central feature of the programme's international dimension is its operation as an **English-medium postgraduate degree**. The Joint International Master's Regulations explicitly state that the **language of instruction is English**, while the **Master's Thesis** is written in **English**, with an extended abstract in **Greek** and **Lithuanian**.

This language framework supports the international accessibility of the programme and enables students and staff from different academic and national backgrounds to participate in a common academic environment. At the same time, the inclusion of Greek and Lithuanian in the thesis abstract reflects the joint and binational identity of the degree.

15.4 International and Digital Delivery Model

The programme's international dimension is further strengthened by its mode of delivery. According to the Joint International Master's Regulations, the educational process is organised through **synchronous distance education**, designed to ensure proper pedagogical planning and interactivity. In addition to remote teaching, **eight hours of in-person academic work per course** are offered.

The Regulations also state that the digital infrastructure supporting the programme is based on **Microsoft Teams** and **E-COURSE**, while the Department of Pedagogy of Klaipėda University provides complementary technical support, including support for distance-learning infrastructure. The uploaded material from Klaipėda University further refers to its **Virtual Learning Environment (VLE)** as a platform supporting communication, assignments, and mentoring.

This model allows the programme to function as a genuinely international academic environment in which students and staff can participate across institutional and geographic boundaries while remaining part of a common postgraduate learning community.

15.5 Joint Degree and Shared Academic Identity

The international and joint nature of the programme is formally expressed in the award of a **Joint Master's Degree in Educational Sciences**. According to the Regulations, the Joint Diploma bears the official logos of both the **University of Ioannina** and **Klaipėda University** and is signed by the relevant authorities of both institutions.

This shared degree structure reinforces the idea that the programme does not consist of two separate national pathways, but of a single integrated postgraduate programme with common academic identity, common standards, and common recognition by both institutions.

15.6 Mobility Opportunities

The Joint International Master's Regulations explicitly provide that students and staff enrolled in the programme may participate in **international mobility schemes**, including **Erasmus+ mobility actions**, in accordance with the applicable regulations of the partner institutions and the rules of the Erasmus+ Programme.

Students may also participate in Erasmus+ traineeship or mobility activities, where available and approved under the rules of the partner institutions. Such mobility does not constitute a compulsory internship component of the Joint Master's Programme unless formally recognised by the Programme Study Committee.

This means that mobility is an important opportunity associated with the international profile of the programme, even if it is not structurally mandatory for all students.

15.7 Academic Recognition of Mobility

The Joint International Master's Regulations state that mobility is an important opportunity associated with the international profile of the programme, even if it is not structurally mandatory for all students. ECTS recognition or transfer is applied

where formally approved by the Programme Study Committee and in accordance with the rules of the partner institutions.

This provision is particularly important in ensuring that international mobility can be integrated into the academic path of students without undermining the coherence of the programme. It also reflects the programme's commitment to European academic standards of transparency, recognition, and mobility.

15.8 Institutional Context for Mobility

The broader institutional environments of the partner universities strengthen the mobility and international dimension of the programme.

At the **University of Ioannina**, the Departmental Study Guide refers to **Erasmus+ programmes**, mobility opportunities, international collaborations, and intensive international academic activities. It also notes the existence of criteria and procedures for student participation in Erasmus mobility.

At **Klaipėda University**, the uploaded materials indicate institutional support for study-abroad programmes and international student services. In addition, the University's participation in the **EU-CONEXUS** alliance reflects its broader commitment to international academic collaboration, joint study opportunities, and mobility.

These institutional contexts support the mobility potential of students and staff participating in the Joint International Master's.

15.9 International Academic Experience

The programme's international dimension should not be understood only in terms of physical mobility. It is also expressed through the daily academic experience of students in a joint, binational, and English-medium educational environment. Students study within a curriculum jointly organised by two universities, participate in digitally connected academic activities, are subject to shared governance and quality assurance structures, and ultimately receive a joint degree.

In this sense, the programme offers international academic experience even beyond formal mobility periods. Its structure encourages intercultural academic exchange, collaboration across institutional cultures, and participation in a broader European framework of postgraduate education.

15.10 Internationalisation and Graduate Development

The mobility and international dimension of the programme contribute directly to the development of the graduate profile. Through its joint structure, international academic language, digital delivery, mobility opportunities, and shared standards, the programme supports students in developing:

- intercultural academic competence;
- the ability to work in international and interdisciplinary environments;
- familiarity with European higher education cooperation;
- and the capacity to engage with educational innovation from a comparative and international perspective.

These dimensions are particularly relevant for a programme dealing with digital learning, AI, and gamification, all of which are fields shaped by rapid international developments and transnational academic exchange.

15.11 Concluding Perspective

The Joint International Master's **AI for Digital Learning and Gamification** has a strong international dimension at every level of its design and operation. Its character as a joint degree between two universities in different countries, its English-medium delivery, its shared governance, its digital teaching model, and its provision for Erasmus+ mobility all contribute to a rich and coherent international academic profile.

For students, this means that the programme offers not only advanced postgraduate education in a contemporary field, but also participation in an international academic environment shaped by cooperation, recognition, mobility, and shared responsibility across two European universities.

16. Digital Learning Environment and Learning Resources

16.1 General Digital Learning Framework

The Joint International Master's Programme **AI for Digital Learning and Gamification** is delivered within a digitally supported learning environment that reflects both the academic subject of the programme and its joint international structure. Because the programme is organised through **synchronous distance education**, digital infrastructure is not merely supportive but central to the educational process. The Joint International Master's Regulations explicitly state that the programme uses synchronous distance education methods designed to ensure appropriate pedagogical planning and interactivity.

This digital framework enables students and staff from the two partner universities to participate in a common academic environment, supports real-time teaching and communication, and facilitates access to learning materials, supervision, and assessment processes.

16.2 Core Digital Platforms

According to the Joint International Master's Regulations, the main digital platforms supporting the educational process are **Microsoft Teams** and **E-COURSE**. These are identified as the core digital tools through which the programme's distance education infrastructure is organised.

These platforms support key dimensions of delivery programme, including:

- synchronous online teaching;
- communication between students and teaching staff;
- sharing of course materials;
- submission and management of assignments;
- organisation of course-related activities;
- and the broader administration of the digital learning process.

Their use is consistent with the programme's academic identity as a digitally delivered and pedagogically designed Joint International Master's.

16.3 Complementary Digital Infrastructure

The digital learning environment of the programme is also supported by the contribution of the partner institutions. The Joint International Master's Regulations state that the **Department of Pedagogy of Klaipėda University** provides complementary administrative and technical support, including **distance learning infrastructure**.

In addition, the uploaded material from Klaipėda University describes the **Virtual Learning Environment (VLE)** as a platform providing students and academic staff with communication, assignment, and mentoring tools. It also notes that lecturers may monitor student activity and that the system supports participation from different locations.

This complementary infrastructure strengthens the technical and academic capacity of the programme and supports the international and digitally mediated character of the degree.

The digital learning environment of the programme is supported not only by its core teaching platforms but also by a broader ecosystem of online services made available through partner institutions and the programme's distance-learning framework. These services support academic communication, course administration, collaborative work, supervision, access to educational resources, and assessment processes. In practical terms, students may use digital tools for attending synchronous classes, accessing course materials, submitting assignments, receiving feedback, participating in discussions, engaging in collaborative activities, consulting supervisors, and preparing for online examinations. This complementary digital infrastructure strengthens the technical and academic capacity of the programme and supports its identity as an international, digitally delivered, and pedagogically designed Joint International Master's.

16.4 Digital Learning and Pedagogical Interactivity

The Joint International Master's Regulations emphasise that synchronous distance education must be organised in a way that ensures **proper pedagogical design** and **interactivity**. This is a particularly important element of the programme's digital learning environment, since it means that digital platforms are used not only for the transmission of content but for the creation of an active and pedagogically meaningful postgraduate learning process.

The digital learning environment is therefore expected to support:

- real-time interaction;
- discussion and collaborative engagement;
- guided participation in academic tasks;
- online supervision and mentoring;
- and the integration of teaching, learning, and assessment.

This is fully aligned with the subject matter of the programme, which itself focuses on digital pedagogy, AI-supported learning, gamification, and human-machine interaction.

16.5 Access to Learning Materials

The programme provides students with access to digital learning materials through its official online platforms and institutional resources. Within the framework of the programme, learning materials are distributed and managed through the digital systems used for course delivery, while students are also supported in their access to broader institutional resources.

The Joint International Master's Regulations state that students of the programme have access to the **libraries**, **repositories**, and **student support services** of both partner institutions throughout their studies.

This means that the digital learning environment extends beyond the virtual classroom and includes access to broader academic resources necessary for postgraduate study and research.

16.6 Libraries and Institutional Repositories

Students of the Joint International Masters are entitled to use the **library resources** and **institutional repositories** of both the **University of Ioannina** and **Klaipėda University**. The Joint International Master's Regulations explicitly provide that postgraduate students have access to the libraries and digital repositories of both partner institutions.

This access is especially important in a research-oriented postgraduate programme, since it supports:

- literature review and academic reading;
- access to scientific publications and educational resources;
- preparation of coursework and written assignments;
- and the development and completion of the **Master's Thesis**.

The repository framework is also important at the end of the programme, since approved theses must be deposited in the institutional repositories of both partner universities.

16.7 Advisor and Online Academic Support

The Joint International Master's Regulations provide that each postgraduate student has an **Advisor during their postgraduate studies**, assigned by the programme bodies to support the student during the online learning process.

This arrangement means that the digital learning environment includes not only access to platforms and materials but also structured human support. Online supervision and advice help students navigate the academic demands of the programme, remain engaged with course requirements, and progress toward the successful completion of the thesis and other academic obligations.

This supervised dimension of digital learning is particularly significant in an international and distance-delivered postgraduate programme.

16.8 Digital Skills and Student Readiness

The Joint International Master's Regulations state that the teaching staff of the programme possess the necessary **digital skills** required for the implementation of distance education.

This is important because the quality of the digital learning environment depends not only on the presence of platforms but also on the ability of instructors to use them effectively for teaching, communication, and assessment. The curriculum itself further supports student development in this area through courses such as **Digital Skills and Social Media**, **AI-Powered Content Creation & Smart Educational Technologies**, and **AI in Learning Design, Analytics, and Decision-Making**, which help students strengthen their own digital and academic competences.

The digital environment of the programme therefore functions both as a medium of learning and as a context in which relevant academic and professional competences are developed.

16.9 Technical Access and Platform Use

The uploaded material from Klaipėda University recommends the use of the latest versions of **Firefox** or **Chrome** for the best experience with its **Virtual Learning Environment**.

While the Joint International Master's Regulations do not list detailed technical specifications for all programme platforms, the successful participation of students in a synchronous and digitally supported programme presupposes regular internet access, suitable devices, and the ability to use the required digital systems for attending classes, accessing resources, submitting assignments, and participating in online academic communication. This should be understood as part of the normal study expectations of the programme.

Successful participation in the programme presupposes regular access to the required digital systems and a basic level of digital readiness. Students are expected to use appropriate devices and updated software or browsers, and to have reliable internet access for synchronous teaching, assignment submission, communication, and online assessment. Where online examinations are concerned, access to a webcam and microphone may also be required. The programme seeks to support students through clear technical instructions, prior guidance on platform use, and orientation to the main digital environments used for learning and assessment.

For remote online examinations and remote assessments, students are expected to follow the technical and procedural instructions communicated by the Programme and to use only institutional or institutionally approved digital platforms and tools. Access to online assessment activities may require secure login through an institutional account, identity verification, webcam and microphone access where necessary, and compliance with the applicable rules on academic integrity, data protection, confidentiality, and cybersecurity.

16.10 Digital Environment and Accessibility

The programme's digital learning environment is based on the principles of equality and inclusion. The Joint International Master's Regulations explicitly state that equal access to digital learning resources, platforms, study materials, and learning activities must be ensured for all students. They also provide that the study process should take into account the individual needs of students, enabling adaptations to the learning environment, teaching methods, study materials, and assessment methods. Alternative examination arrangements for students with disabilities and/or special educational needs are applied in accordance with the relevant institutional guidelines.

This principle is applied more broadly to the digital learning environment. This means that the programme's digital environment operates within an inclusive academic system supported by the accessibility and student support structures of the partner institutions, ensuring equal access to learning resources, study activities, and communication tools.

The integrated e-learning environment of the programme is expected to function within a fully accessible academic framework and to be usable by students with disabilities and/or special educational needs. Accessibility in this context includes not only the possibility of alternative examination arrangements where appropriate, but also broader attention to inclusive participation in the online learning process. In this sense,

accessibility is understood as a pedagogical, technical, and institutional principle of the programme's digital environment.

16.11 Digital Learning Environment and the Identity of the Programme

The digital learning environment is closely connected to the identity of the Joint International Master's itself. Since the programme focuses on **digital education, AI in education, gamification, learning analytics, and human-machine interaction**, the digital organization of the programme is not external to its subject matter but part of its pedagogical logic.

The platforms, digital communication structures, and online modes of interaction used by the programme therefore contribute directly to the learning experience and reinforce the coherence between the programme's content and its method of delivery.

On the University of Ioannina side, the broader academic environment of the programme is further strengthened by the institutional relevance of the Laboratory of New Technologies and Distance Learning of the Department of Early Childhood Education, which supports educational and research activities in information technology, computer-supported educational programmes, and research methodology. This wider academic context is closely aligned with the digital and pedagogical profile of the Joint International Master's.

16.12 Concluding Perspective

The digital learning environment and learning resources of the Joint International Master's are designed to support a modern, interactive, and research-oriented postgraduate experience. Using **Microsoft Teams, E-COURSE**, complementary institutional infrastructure such as the **VLE**, access to libraries and repositories, and structured academic supervision, the programme provides students with the digital and academic resources required for successful participation and progression.

This environment supports not only the operational delivery of the programme, but also its broader academic mission: to educate graduates who can think critically, learn collaboratively, and work effectively in the evolving field of digital and AI-supported education.

17. Quality Assurance and Evaluation

17.1 Quality Assurance Framework

The Joint International Master's Programme **AI for Digital Learning and Gamification** operates within a structured quality assurance framework that reflects its identity as a **joint, international, and research-oriented** postgraduate degree. Quality assurance is embedded in the governance, academic design, delivery, assessment, and review of the programme, and is exercised through the cooperation of the partner institutions and the programme's own academic bodies.

Because the programme is jointly organised by the **University of Ioannina** and **Klaipėda University**, quality assurance is not confined to a single national or institutional framework. Instead, it is based on shared academic responsibility, coordinated procedures, and the interaction of the quality-related structures of both universities.

17.2 Institutional Quality Assurance Context

The Joint International Master's Regulations explicitly state that the programme is subject to the quality assurance mechanisms of both partner institutions. This includes cooperation between the quality-related academic and administrative bodies of the two universities and the integration of the programme into their internal evaluation and monitoring procedures.

On the Greek side, the programme operates within the broader postgraduate and academic quality framework of the University of Ioannina, including the role of the Institutional Postgraduate Studies Committee and the competent institutional bodies. On the Lithuanian side, quality supervision of the programme is embedded within Klaipėda University's multi-level internal quality assurance system. Within this framework, the Educational Sciences Study Programme Committee participates in programme-level quality supervision and improvement and is identified in the Regulations as one of the competent bodies contributing to the academic oversight of the programme.

This dual institutional embedding supports the academic credibility and quality consistency of the programme.

17.3 Role of the Programme Study Committee in Quality Assurance

The **Programme Study Committee (PSC)** plays a central role in the quality assurance of the Joint International Master's. As the principal joint academic body of the programme, it is responsible not only for governance and academic coordination, but also for the monitoring and development of the curriculum and the overall quality of the programme.

Through its competences, the PSC ensures that the programme remains aligned with its academic objectives, intended learning outcomes, and the evolving scientific fields to which it belongs. It also acts as the body through which academic changes, improvements, and procedural oversight are formally approved.

17.4 Role of the Coordinating Committee in Quality Development

The **Coordinating Committee (CC)** has an important operational and developmental role in quality assurance. According to the Joint International Master's Regulations, the CC is responsible for monitoring the operation of the programme and for preparing proposals related to its improvement. Its competences include:

- preparing proposals for amendments to the study programme;
- recommending redistribution of courses between semesters;
- recommending measures related to the qualitative upgrading of the programme;
- proposing the invitation of visiting professors;
- and contributing to the annual programme report and budget planning.

These responsibilities show that quality assurance in the programme is not limited to retrospective evaluation but includes active planning for improvement and renewal.

17.5 Quality Supervision at Klaipėda University

The Joint International Master's Regulations specifically describe the role of the **Educational Sciences Study Program Committee of Klaipėda University** in the programme's quality framework. According to the Regulations, this body is responsible for the **quality supervision of the study process** according to university study quality indicators. Its responsibilities include:

- approval of study plans;
- review of programme implementation and operation;
- proposal of amendments to the study programme;
- certification and improvement of study subjects;
- monitoring of recommendations arising from evaluation;
- and cooperation with the **Vice-Rector for Studies**, the **Study Service**, the **University Student Union**, and the relevant faculty-level academic authorities.

This makes clear that quality assurance is institutionally anchored on the Lithuanian side in a specific and structured way.

17.6 Monitoring of Curriculum Relevance and Renewal

The Regulations state that the study programme may be **reformed annually** in order to renew the curriculum, follow current developments in the scientific field, and make the best possible use of the available teaching staff. The **Coordinating Committee** prepares a plan for the modification of the study programme and submits it to the **Programme Study Committee** for approval.

This provision is especially important in a programme dealing with rapidly evolving fields such as:

- artificial intelligence in education;
- digital learning environments;
- gamification;
- learning analytics;
- internet safety and AI ethics;
- and human-machine interaction.

Curriculum renewal is therefore a formal component of the programme's quality assurance system.

17.7 Evaluation of Teaching and Learning

Quality assurance in the programme is also linked to the evaluation of teaching, learning, and academic effectiveness. The Joint International Master's Regulations provide for the monitoring of programme performance and for follow-up procedures connected with evaluation findings. They also indicate that competent programme bodies may take decisions related to curriculum improvement, course redistribution, and the enhancement of educational quality.

In addition, the partner institutions themselves maintain wider academic quality structures. For example, the Study Guide of the **Department of Early Childhood Education** of the University of Ioannina refers to the **Internal Evaluation Committee / OM.E.A.**, which supports departmental quality monitoring and internal evaluation processes.

This suggests that the programme benefits both from its own joint quality assurance structures and from the broader evaluation culture of the two institutions.

17.8 Student Feedback and Participation in Quality Processes

Although the Regulations focus primarily on formal governance bodies, the programme's quality culture is also linked to student participation and the student academic experience. Student rights, complaints procedures, access to support structures, and academic advising all contribute to the identification and resolution of issues affecting quality.

The complaints and objections procedure defined in the Regulations allows students to submit concerns formally and confidentially through the Secretariat or the programme website. These are then reviewed by the **Programme Director**, the **Coordinating Committee**, and, where necessary, the **Programme Study Committee**.

The Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) provide for procedures for submitting and reviewing appeals related to the assessment of study results. In addition, student representatives may participate in the programme's governance structures (e.g., the Programme Study Committee or other relevant bodies), thereby contributing to decision-making processes and the continuous enhancement of study quality.

This mechanism contributes to quality assurance by enabling programme-level response to student concerns and supporting continuous improvement.

Student participation in quality processes may also include the systematic and anonymous electronic evaluation of courses and teaching practices through the relevant quality assurance procedures of the partner institutions. Such feedback contributes to the continuous review and improvement of the programme and supports the maintenance of a responsive, student-centred, and academically effective learning environment.

17.9 Quality Assurance in Assessment and Academic Integrity

Quality assurance in the Joint International Master's also extends to the assessment process and the safeguarding of academic integrity. The Regulations specify:

- formal assessment methods and weighting;
- examination periods;
- rules for remote and alternative assessment;
- publication deadlines for grades;
- correction procedures in the case of obvious error;
- and rules for the retention of examination materials.

They also contain explicit provisions on:

- plagiarism;
- copying in examinations;
- declaration of the use of the work, ideas, and AI tools of others;
- and disciplinary handling of academic misconduct.

These elements are integral to quality assurance because they protect the academic reliability, fairness, and credibility of the programme.

In digitally mediated assessment contexts, quality assurance is further supported through clear grading criteria, alignment with intended learning outcomes, and appropriate academic integrity safeguards. Depending on the form of assessment, such measures may include plagiarism detection software, authorship verification through oral examination, question randomisation, structured time limits, and other procedures judged appropriate to ensure fairness, reliability, and academic credibility. The broader online assessment framework of the programme is also informed by European quality assurance principles and continuous review processes, including transparent grading rubrics and ongoing programme improvement.

17.10 Accessibility, Inclusion and Quality

The quality assurance framework of the programme also includes attention to **equal access** and **inclusion**. The Joint International Master's Regulations provide that assessment procedures must take into account equal access for all students to the necessary means and allow alternative examination protocols for students with disabilities and/or special educational needs in accordance with the relevant institutional frameworks.

This principle is reinforced by the support structures of both partner institutions. The Departmental Study Guide of the University of Ioannina refers to the **Equal Access Unit**, the **Counselling Centre**, and other student support services, while the uploaded Klaipėda University material refers to disability-related study adaptation and broader student welfare services.

In this sense, quality assurance in the programme includes not only academic standards but also the fairness and inclusiveness of the learning environment.

17.11 International and Joint Quality Dimension

Because the programme is a joint degree, quality assurance has an explicitly international dimension. The programme is monitored through shared governance

structures, dual institutional involvement, common academic standards, and common recognition of ECTS. Students are enrolled at both universities, and the programme operates through a unified academic framework coordinated across two institutional environments.

This gives quality assurance in the Joint International Master's a broader significance: it supports not only academic excellence, but also the integrity of the programme as a truly joint European postgraduate degree.

17.12 Concluding Perspective

Quality assurance and evaluation in the Joint International Master's **AI for Digital Learning and Gamification** are continuous and multi-layered processes. They involve:

- the competent bodies of both universities;
- the programme's own governance structures;
- annual curriculum review;
- assessment of integrity procedures;
- student feedback and complaints mechanisms;
- and inclusive access arrangements.

Through this framework, the programme can maintain academic standards, adapt to developments in the field, respond to student needs, and strengthen its quality as a joint, international, digitally delivered, and research-oriented Master's degree.

18. Practical Information and Key Contacts

18.1 General Practical Information

The Joint International Master's Programme **AI for Digital Learning and Gamification** is delivered within a shared academic and administrative framework involving both the **University of Ioannina** and **Klaipėda University**. Because the programme is jointly organised and students are enrolled at both institutions, practical information for students includes not only programme-specific matters but also access to the academic and support structures of both partner universities.

In practical terms, students should use the official communication channels of the programme and the partner institutions for matters related to applications, enrolment, tuition, course participation, assessment, supervision, mobility, student support, and thesis procedures. The Joint International Master's Regulations also make clear that secretarial and administrative support is provided jointly by the **Department of Early Childhood Education** of the University of Ioannina and the **Department of Pedagogy** of Klaipėda University, with the former bearing primary responsibility for administrative coordination.

18.2 Academic Calendar

According to the Joint International Master's Regulations, the programme begins in the **first semester of each academic year**, and before the start of each academic year the **Programme Study Committee** adopts a **unified academic calendar**, taking into account the academic calendars of both partner universities.

More generally, the uploaded institutional material from Klaipėda University states that its academic year begins on **1 September** and ends on **30 June**, while for some study programmes it may extend until **31 January**. The same material notes that the **autumn semester** includes **15 lecture weeks and 1 independent study week**, followed by a **4-week winter examination session**, while the **spring semester** follows the same pattern, with **15 lecture weeks, 1 independent study week, and a 4-week spring examination session**.

Students should rely on the officially published annual calendar of the Joint International Master's for exact semester dates, teaching periods, examination periods, submission deadlines, and thesis-related milestones.

18.3 Secretariat and Administrative Support

The Joint International Master's Regulations provide that the programme receives secretarial and administrative support jointly from the **Department of Early Childhood Education** of the **University of Ioannina** and the **Department of Pedagogy** of **Klaipėda University**. They further specify that the **Department of Early Childhood Education** bears the primary responsibility for administrative coordination, while the Department of Pedagogy contributes complementary administrative and technical support.

Students should therefore expect programme-related administrative communication and support to be coordinated through the official programme structures, with both departments contributing according to their institutional responsibilities.

18.4 Course Registration

Course registration is completed electronically at the beginning of each semester within the deadline announced by the Secretariat and/or the official programme communication channels. Students are expected to register the courses they will attend in the relevant study period, in accordance with the curriculum structure and the applicable academic rules of the programme. Only duly registered courses are considered active for the purposes of participation and assessment.

18.5 Academic Communication Channels

Because the programme is delivered through **synchronous distance education**, digital communication is central to academic participation. The Joint International Master's Regulations specify that the programme uses **Microsoft Teams** and **E-COURSE** as core platforms for the educational process.

In addition, the uploaded material from Klaipėda University refers to its **Virtual Learning Environment (VLE)** as a platform supporting communication, assignments, and mentoring.

Accordingly, students should expect official communication regarding courses, schedules, assignments, supervision, and academic activities to take place through:

- the official programme website and institutional websites;
- the programme's digital learning platforms;
- official university email communication;
- and the Secretariat and academic staff of the programme.

Official communication in the programme is carried out through the Secretariat, the approved digital learning platforms, institutional email, and other formally designated programme channels. Students are expected to monitor these communication channels regularly, since announcements concerning teaching, assignments, examinations, technical guidance, online meetings, thesis procedures, and administrative deadlines may be communicated through them. Effective use of official digital communication channels forms an essential part of academic participation in the programme.

18.6 Libraries, Repositories and Learning Resources

The Joint International Master's Regulations state that students of the programme have access to the **libraries**, **digital repositories**, and **student support services** of both partner institutions throughout their studies.

This is especially important in a research-oriented postgraduate programme, since students are expected to use academic literature, digital resources, and institutional repositories for coursework, independent study, and the preparation of the **Master's Thesis**. The same Regulations also provide that approved theses must be deposited in the **"OLYMPIAS" Digital Repository** of the University of Ioannina and in the institutional repository of **Klaipėda University**.

18.7 Student Support Services

Students in the Joint International Master have access to support services provided by both universities.

At **Klaipėda University**, the uploaded support material states that students may receive support centrally and within academic units in areas such as admissions, careers, study abroad, finance, social support, psychological support, spiritual support, and dormitory-related services. It also refers to disability-related study adaptation and a student collaboration space.

At the **University of Ioannina**, the uploaded Departmental Study Guide refers to the **Student Support Unit**, the **Counselling Centre**, the **Equal Access Unit**, student welfare services, and Erasmus-related support structures.

Together, these services form an important practical support network for students throughout the duration of the programme.

Students in the Joint International Master have access to a range of academic and student support services made available through the partner institutions and the programme's own structures. These may include academic advising, online supervision, library and repository access, accessibility and disability support, counselling and welfare services where available, mobility support, and guidance related to digital participation in the programme. Within the online learning environment more specifically, students may also receive technical guidance concerning platform use, access to digital learning materials, and support related to participation in online assessment procedures. The aim of these services is to support continuity of study, equal participation, and successful academic progression within an international and distance-delivered postgraduate environment.

18.8 Academic Advising and Technical Supervision

The Joint International Master's Regulations provide that each postgraduate student is assigned an **Academic Advisor** by decision of the **Programme Study Committee**. Further students also have a technical supervisor during their postgraduate studies to refer to for supporting them on technical issues for the online learning process.

Students should therefore make use of these academic support roles for guidance concerning study progression, participation in the academic life of the programme, and successful completion of coursework and thesis requirements. Next follows a more detailed description on the role of the Academic Advisor.

18.8.1 Academic Advisor

Academic advising in the Joint International Master's Programme "AI for Digital Learning and Gamification" is intended as a continuing support process throughout the student's period of study. Its purpose is to facilitate academic adjustment, strengthen student engagement, support successful study progression, and provide timely guidance on academic, research, professional, and practical matters related to the programme.

At the beginning of each academic year, and no later than November, the competent academic body of the programme may assign an Academic Advisor to each newly admitted student. Advisors are appointed from among the academic staff, with an effort to ensure a balanced distribution of students among the joint master staff members. As a rule, the same Academic Advisor remains assigned to the student until the completion of their studies.

The Academic Advisor informs, guides, and supports students in relation to matters such as the transition into postgraduate and international academic study; course content and participation in workshops and other learning activities; use of laboratories, digital tools, and academic infrastructure; difficulties encountered in coursework; and the various modes of assessment used in the programme. The Advisor also provides guidance on compulsory and elective courses, including the most appropriate sequence of study, in order to support successful academic progression and help students make informed academic choices in accordance with their interests, skills, and abilities.

Academic advising may also include discussion of examination results and overall academic progress, guidance on the selection of topics for academic papers, projects, and, where appropriate, the Master's Thesis, as well as advice on further study opportunities, including doctoral studies and other postgraduate opportunities in Greece and abroad. In addition, students may seek guidance on professional prospects and career pathways in education, research, the public sector, the private sector, and international contexts.

Where appropriate, the Academic Advisor may also discuss family, personal, health-related, financial, or other issues that create obstacles to academic progress and may guide the student toward the relevant support structures of the programme or the partner universities. In this respect, academic advising is understood not only as support for course progression, but also as part of the wider student-support environment of the Joint International Master's.

18.8.2 Communication with Academic Advisor

Communication between students and the Academic Advisor may take place by email, online meeting, or in person, depending on the mode of delivery and the practical arrangements of the programme. Meetings may be individual or group-based. In addition, the programme may organise general academic advising sessions before important academic procedures, such as registration, course selection, examinations, thesis preparation, or other key stages of study.

In exceptional cases, and where serious reasons exist, a student may request a change of Academic Advisor by submitting a reasoned request to the Secretariat of the programme. The request is examined by the competent academic body of the programme in accordance with the applicable academic procedures.

For good academic practice, the Academic Advisor may keep a brief record of meetings with the student, including the main issues discussed, actions to be taken, academic progress noted, and the date of the meeting. Such a record helps support continuity, clarity, and constructive follow-up in the advising process and send a report periodically to the International Joint Masters' committee.

18.9 Mobility and International Opportunities

The Joint International Master's Regulations state that students and staff of the programme may participate in **Erasmus+ mobility actions** and other international mobility schemes, in accordance with the applicable regulations and subject to selection and funding availability.

The Departmental Study Guide of the University of Ioannina also refers to Erasmus mobility structures and international academic activity, while Klaipėda University's institutional profile highlights international cooperation and participation in **EU-CONEXUS**.

Students interested in mobility opportunities should consult the official programme communication, the Secretariat, and the relevant international offices of the partner institutions.

18.10 Tuition, Scholarships and Financial Information

The Joint International Master's Regulations state that tuition fees are **€7,000 for full-time study** (for the entire duration of the program) and **€9,000 for students from outside the European Union** (for the entire duration of the program). The same Regulations also include provisions for **exceptional academic performance scholarships** and for **tuition fee exemptions** under the applicable legal framework.

Students should consult the official annual call and programme communication for detailed information on deadlines, payment arrangements, scholarship opportunities, and exemption procedures.

18.11 Complaints, Objections and Student Communication

The Joint International Master's Regulations include formal **complaints and objections procedure**. Students may submit complaints or objections electronically to the Secretariat of the department providing administrative support or through a designated form on the website. The procedure is handled by the **Programme Director**, the **Coordinating Committee**, and, where necessary, the **Programme Study Committee**, under principles of confidentiality, discretion, and data protection.

This procedure ensures that students have a clear channel for raising concerns related to the operation of the programme.

18.12 Indicative Key Contacts

For the purposes of the Student Guide, the key contacts of the programme should include at least the following categories:

- Director of the Joint Master's Programme;
- Programme Secretariat / Administrative Coordination;
- Department of Early Childhood Education, University of Ioannina;
- Department of Pedagogy, Klaipėda University;
- Academic Advisors / Thesis Supervisors;
- International / Erasmus Offices of the partner institutions;
- Student Support Services of both universities.

Where the final version of the Student Guide is prepared for publication, this subsection may be supplemented with official names, email addresses, websites, and office details from the current programme administration.

In addition to the categories already listed, the programme may also designate a contact technical supervisor for the integrated e-learning environment to support lecturers and students in the effective use of the programme's digital systems. Where

such a role is formally designated, the relevant contact details should be communicated to students through the official communication channels of the programme.

18.13 Useful Institutional and Departmental References

For practical navigation of the academic environment, students should consult:

- the official website of the **Joint International Master's**;
- the website of the University of Ioannina and the Department of Early Childhood Education;
- the website of Klaipėda University and the Department of Pedagogy;
- the digital platforms used by the programme;
- and the relevant student support and mobility services of both institutions.

These channels provide the most reliable and up-to-date practical information during study.

18.14 Concluding Perspective

Practical information and key contacts are essential to the successful functioning of a joint international programme. In the case of the Joint International Master's **AI for Digital Learning and Gamification**, students study within a shared framework that combines the academic and administrative structures of two universities. For that reason, effective use of official communication channels, digital platforms, student support services, academic advising, and programme administration is a central part of successful participation in the programme.

19. Final Provisions and Additional Academic Information

19.1 Nature and Purpose of the Study Guide

The present Study Guide is intended to provide students, academic staff, and other interested parties with a clear and structured presentation of the Joint International Master's Programme **AI for Digital Learning and Gamification**. Its purpose is to support understanding of the academic identity, structure, governance, curriculum, learning processes, and practical operation of the programme in a student-friendly and academically coherent form.

The Study Guide is therefore an informative and academic reference document. It is designed to facilitate access to essential information about the programme, but it does not replace the official legal and regulatory framework that governs the programme.

19.2 Relationship to the Joint International Master's Regulations

The primary governing document of the programme is the official **Joint International Master's Regulations** and the related founding decision and cooperation framework adopted by the competent bodies of the two partner universities. The content of the present Study Guide must be read in conformity with those official texts. Where the Study Guide summarises or reformulates regulatory provisions for explanatory purposes, the official Regulations remain the authoritative source.

Accordingly, in any matter concerning the formal operation, governance, admission procedures, student status, assessment rules, thesis procedures, quality assurance, or degree award of the programme, the official decisions of the competent bodies and the approved Regulations prevail.

19.3 Annual Updating of Information

The programme operates in a dynamic academic field that includes digital learning, artificial intelligence, gamification, learning analytics, and related pedagogical developments. In addition, certain academic and administrative elements of the programme may be updated from year to year. The Joint International Master's Regulations explicitly provide that the curriculum may be revised annually to renew the programme and follow developments in the field.

For this reason, the Study Guide is reviewed and, where necessary, updated on an annual basis to remain aligned with the applicable legal framework, institutional regulations, programme decisions, academic procedures, and quality assurance requirements. In particular, it may be updated to reflect:

- approved curriculum revisions;
- annual academic calendar adjustments;
- updated administrative procedures;
- changes in the applicable national and European legislation and institutional regulatory framework;
- renewed contact information;

- and other changes adopted by the competent bodies of the programme and the partner institutions.

Students are therefore expected to consult the current official version of the Study Guide and the official communications of the programme during their studies.

19.4 Academic Calendar and Official Announcements

The Study Guide provides general information on the structure and timing of the academic year. However, the exact dates for teaching periods, examinations, submissions, thesis procedures, and related academic milestones are determined each year through the **unified academic calendar** adopted by the **Programme Study Committee**.

For this reason, students should always rely on:

- the officially approved annual academic calendar;
- announcements issued by the programme bodies;
- Secretariat communications;
- and the official websites and digital platforms of the programme and partner institutions.

Official announcements issued through these channels form part of the practical academic framework of the programme.

19.5 Language and Use of the Guide

The language of instruction of the programme is **English**, and the Study Guide is accordingly prepared in English as the principal reference document for students of the Joint International Master's.

Where parts of the academic and institutional framework are derived from documents or procedures of the partner institutions in **Greek** or **Lithuanian**, the English-language presentation in the Study Guide is intended to support clarity and accessibility for the international student body of the programme. In all such cases, the official institutional and regulatory texts remain authoritative in accordance with the applicable institutional and legal framework.

19.6 Diploma, Diploma Supplement and Academic Records

Upon successful completion of the programme, students are awarded a **Joint Master's Degree in Educational Sciences**. The Joint International Master's Regulations also provide that the **Joint Diploma** bears the logos of both partner institutions and is signed by the relevant authorities of both universities.

The Regulations further provide that the **Diploma Supplement** includes grading information relevant to both institutions and serves the purposes of academic transparency and recognition.

Students should therefore understand the Study Guide as complementary too, but distinct from, the formal academic documents issued upon graduation.

19.7 Institutional Repositories and Academic Visibility

The programme places particular emphasis on the academic documentation and visibility of postgraduate work. The Joint International Master's Regulations require that approved Master's Theses be deposited in the institutional repositories of both partner universities, namely the **"OLYMPIAS" Digital Repository** of the University of Ioannina and the institutional repository of **Klaipėda University**.

This provision supports transparency, institutional archiving, and the dissemination of postgraduate academic work produced within the programme.

19.8 Matters Not Explicitly Covered in the Study Guide

No Study Guide can regulate every possible academic, administrative, or procedural issue that may arise during the operation of a postgraduate programme. For matters not explicitly covered in the present Guide, the applicable provisions are those contained in:

- the official Joint International Master's Regulations;
- the approved decisions of the competent bodies of the programme;
- and the applicable institutional and legal framework of the partner universities.

This ensures continuity, legal certainty, and consistency in the operation of the programme.

19.9 Final Statement

The Joint International Master's Programme **AI for Digital Learning and Gamification** is a joint, research-oriented, and internationally coordinated postgraduate programme designed to respond to contemporary developments in education and digital innovation. The present Study Guide aims to support students throughout their academic journey by presenting the programme in a clear, coherent, and accessible manner, while remaining aligned with its official regulatory framework.

It should therefore be read as a practical and academic companion to the official programme regulations, and as part of the wider academic culture of cooperation, quality, pedagogical responsibility, and innovation that defines the programme.

20. Annexes

The following Annexes may accompany the present Study Guide in order to provide students and other interested parties with additional practical, academic, and administrative information. The Annexes form a useful complement to the main body of the Guide, especially where more detailed or annually updated material is required.

20.1 Purpose of the Annexes

The Annexes are intended to:

- support the practical use of the Study Guide;
- present structured academic and administrative information in an accessible format;
- gather technical or supplementary material that would be too detailed for the main body of the Guide;
- and ensure that students have easy access to the key documents and reference tools necessary for the successful completion of their studies.

The exact content of the Annexes may be updated in accordance with decisions of the competent bodies of the programme and the partner institutions.

20.2 Included Annexes

The included Annexes in this study guide are:

- Annex I. Joint International Master's Curriculum Tables by Semester
- Annex II. Joint International Master's Detailed Course Catalogue
- Annex III. Master's Thesis Guidelines
- Annex VI. Online Services, Digital Platforms, and Online Assessment Support
- Annex V. Useful Websites and Online Resources for the Joint International Master's AI4DLG
- Annex VI. Joint International Master's AI4DLG - Participating Faculty Members

Annex I. Joint International Master's Curriculum Tables by Semester

This Annex includes the full curriculum of the programme in tabular form, showing course codes; course titles; ECTS credits; semester placement; and total ECTS per semester. All courses are compulsory.

Semester	Course Code	Course Title	ECTS
1	1.1	Digital Education and Cultures	6
1	1.2	Research Methodology in Education	6
1	1.3	Digital Skills and Social Media	6
1	1.4	AI-Powered Content Creation & Smart Educational Technologies	6
1	1.5	Digital Pedagogy and Language in Digital Contexts	6
Total ECTS of 1 st Semester			30

Semester	Course Code	Course Title	ECTS
2	2.1	AI and Gamification in Education	6
2	2.2	AI in Learning Design, Analytics, and Decision-Making	6
2	2.3	Internet Safety - AI Ethics	6
2	2.4	Systemic Studies and Applications of Gamification	6
2	2.5	Human-Machine Interaction and Virtual Assistants	6
Total ECTS of 2 nd Semester			30

Semester	Course Code	Course Title	ECTS
3	3.1	Master's Thesis	30
Total ECTS of 3 rd Semester			30

Annex II. Joint International Master's AI4DLG Detailed Course Catalogue

This Annex includes extended course descriptions (Proforma) for each module, such as course aims, intended learning outcomes, thematic units, teaching methods, assessment methods, and recommended bibliography.

Proforma - 1.1 Digital Education and Cultures

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	1
COURSE TITLE		Digital Education and Cultures	
CO-ORDINATING LECTURERS		<u>Dr. Themistoklis Gogas</u> , University of Ioannina Dr. Jenny Pange, University of Ioannina Dr. Zoi Nikiforidou, University of Ioannina Dr. Agostino Marengo, University of Foggia Dr. Vito Santamato, University of Foggia	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING			

in-person (%) synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Distance learning (100%) Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to provide students with fundamental knowledge and a critical stance on digital Education and cultures.
SUMMARY	This course covers fundamental theoretical paradigms and research on the impact of educational digital platforms on identity, community, and communication. Students explore how digital technologies shape cultural practices and learning environments. Through their own projects students critically evaluate the connection between digital spaces, learning, teaching and culture.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes
Upon completion of the course, students will be able to: • Define and critically discuss key concepts in digital education and cultures. • Examine the role of digital technologies in shaping cultural practices and learning environments. • Analyze the impact of digital platforms on identity, community, and communication. • Analyze the implications of digital technologies on knowledge production, power relations, and cultural practices.

- Develop critical digital literacies to evaluate, create, and share knowledge in online spaces.
- Apply theoretical perspectives to real-world examples of digital educational practices.
- Critically evaluate theories and debates surrounding digital education and cultures.
- Design and assess digital learning environments that integrate cultural awareness and inclusivity.
- Conduct independent research on contemporary issues in digital education.
- Reflect on their professional role as educators, researchers, or practitioners within a digitally mediated society.

Students will develop:

- **Advanced Knowledge:** Deep understanding of digital pedagogy, media and cultural theory, digital identities, and sociotechnical change.
- **Research Skills:** Competence in qualitative and/or mixed-methods approaches to studying digital education.
- **Practical Competences:** Designing critical, inclusive, and innovative digital learning projects and policies.
- **Professional Skills:** Ability to engage with interdisciplinary debates and apply theory to practice.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following general competences:

- Search, analysis and synthesis of data and information, with the use of the necessary technology: Locating and evaluating scientific literature, analyzing research data, synthesizing findings

- **Decision-making:** Selecting appropriate research designs, methodologies, and data collection approaches
- **Working independently:** Planning and conducting individual research projects throughout all stages
- **Team work:** Collaborating on research activities and understanding group research dynamics
- **Production of new research ideas:** Identifying research gaps and formulating original research questions
- **Project planning and management:** Designing research projects, managing timelines, organizing data collection phases
- **Respect for difference and multiculturalism:** Understanding diverse research perspectives and cultural contexts in educational settings
- **Showing social, professional and ethical responsibility:** Applying research ethics principles and maintaining integrity in research conduct
- **Criticism and self-criticism:** Evaluating research quality and reflecting on research decisions
- **Production of free, creative and inductive thinking:** Developing creative approaches to research design and applying inductive reasoning in data analysis

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Foundations of Digital Education and Cultures	2	2	4
2. Critical Theories & global perspectives on Digital Education	2	2	
3. Digital Literacies	2	2	
4. Networked Learning and Online Communities	2	2	
5. Digital Identity, Power, and Representation	2	2	
6. Learning Cultures	2	2	
7. Media Cultures, and Creative Pedagogies	2	2	
8. Artificial Intelligence and Algorithmic Cultures in Education	2		2
9. Globalization, MOOCs, and Open Education	2	2	
10. Digital Inequalities, Equity, and Social Justice	2		2
11. Digital Citizenship, Ethics, and Policy	2	2	
12. Post-Digital Futures	2	2	4

13. Student Research Presentations and Synthesis	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.

(2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence																			
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> <tr> <td></td><td></td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160		
Activity	Semester workload																		
Lectures	26 hours																		
Seminars	22 hours																		
Fieldwork	12 hours																		
Individual work	50 hours																		
Group work	30 hours																		
Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: • Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.																		

5. RECOMMENDED BIBLIOGRAPHY

Compulsory literature:

- Selwyn, N. (2021). *Education and Technology: Key Issues and Debates*. Bloomsbury.
- Lankshear, C., & Knobel, M. (2015). *Digital Literacy and Digital Literacies*. Peter Lang.
- Jenkins, H., Ito, M., & boyd, d. (2016). *Participatory Culture in a Networked Era*. Polity.
- Bayne, S., & Ross, J. (2014). *The Pedagogy of the Massive Open Online Course*. Routledge.
- Carr, N. (2020). *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton.

Additional literature:

- Bayne, S., & Ross, J. (2014). *The Pedagogy of the Massive Open Online Course*. Routledge.
- Carr, N. (2020). *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton.

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own

Components of second cycle study outcomes description	Explanations
	activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Digital Education and Cultures (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary knowledge of digital education and cultures including theoretical paradigms and research implications.
Ability to conduct research	Students can formulate research problems, design appropriate studies, select suitable methodologies, collect and analyze data using various techniques, critically evaluate existing literature, and draw evidence-based conclusions.
Special abilities	Students can critically evaluate the relationship between digital pedagogy, digital tools, identity formation, digital cultures, roles and inequalities.
Social abilities	Students work effectively in research teams, demonstrate ethical responsibility in research conduct, respect participant rights, and communicate research ideas and findings clearly to diverse audiences.
Personal abilities	Students manage their own learning process, reflect critically on their understanding and research decisions, acknowledge limitations, and make ethically informed decisions considering potential impacts on participants and educational communities.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of digital education and cultures including theoretical paradigms and research implications.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students can formulate research problems, design appropriate studies, select suitable methodologies, collect and analyze data using various techniques, critically evaluate existing literature, and draw evidence-based conclusions.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students can critically evaluate the relationship between digital pedagogy, digital tools, identity formation, digital cultures, roles and inequalities.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students work effectively in research teams, demonstrate ethical responsibility in research conduct, respect participant rights, and communicate research ideas and findings clearly to diverse audiences.	Individual work, group work, consultations	Individual work, group work
5	Students manage their own learning process, reflect critically on their understanding and research decisions, acknowledge limitations, and make ethically informed decisions considering potential impacts on participants and educational communities.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	15	*						0										
Group work	10	15	15	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*												0				
Total:	-	100	100																	

Proforma - 1.2 Research Methodology in Education

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	1
COURSE TITLE		Research Methodology	
CO-ORDINATING LECTURERS		<u>Dr. Liudmila Rupšienė</u> , University of Klaipėda Dr. Charilaos Zaragkas, University of Ioannina Dr. Rasa Grigolienė, University of Klaipėda	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		SPECIALIZED GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING in-person (%)		Distance learning (100%)	

synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to provide students with fundamental knowledge about the basics of the research process, research design and implementation, while developing their ability to critically analyze, evaluate, and conduct qualitative and quantitative research in the field of education.
SUMMARY	This course covers fundamental research methodology concepts for education professionals. The curriculum includes research design, question formulation, and methodology selection across both qualitative and quantitative approaches. Students learn various data collection methods including surveys, interviews, observations, and document analysis. The course addresses ethical considerations in research and introduces relevant statistical concepts for educational studies. Participants develop skills to critically evaluate existing research and design their own studies in educational contexts.

2. LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Brief Guide for drafting Learning Outcomes

Knowledge:

- Epistemological foundations of research
- Research paradigms and theoretical frameworks
- Qualitative and quantitative research approaches
- Data collection methods and techniques
- Analytical procedures and strategies
- Ethical principles in educational research
- Research design principles
- Literature evaluation criteria
- Standards for evidence-based conclusions
- Principles of instrument design
- Types of analytical methods
- Standards for presenting research results
- Principles of collaborative research work
- Research ethics and participant rights
- Communication strategies for different audiences
- Self-directed learning strategies
- Ethical decision-making frameworks
- Research quality and limitation recognition

Skills:

- Apply research methodology knowledge to educational contexts
- Connect theoretical frameworks with research practice
- Select appropriate approaches based on research questions
- Formulate research problems and questions
- Design appropriate research studies
- Select suitable methodologies
- Collect and analyze data using various techniques
- Critically evaluate existing literature
- Draw evidence-based conclusions
- Design research instruments and tools
- Apply appropriate analytical methods
- Interpret research findings
- Present results in structured formats
- Demonstrate ethical responsibility in research conduct
- Respect participant rights
- Communicate research ideas and findings clearly to diverse audiences
- Manage own learning process in research methodology
- Reflect critically on research decisions
- Acknowledge research limitations
- Make ethically informed decisions considering impacts on participants and communities

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following general competences:

- Search, analysis and synthesis of data and information, with the use of the necessary technology: Locating and evaluating scientific literature, analyzing research data, synthesizing findings
- **Decision-making:** Selecting appropriate research designs, methodologies, and data collection approaches
- **Working independently:** Planning and conducting individual research projects throughout all stages
- **Team work:** Collaborating on research activities and understanding group research dynamics
- **Production of new research ideas:** Identifying research gaps and formulating original research questions
- **Project planning and management:** Designing research projects, managing timelines, organizing data collection phases
- **Respect for difference and multiculturalism:** Understanding diverse research perspectives and cultural contexts in educational settings
- **Showing social, professional and ethical responsibility:** Applying research ethics principles and maintaining integrity in research conduct
- **Criticism and self-criticism:** Evaluating research quality and reflecting on research decisions
- **Production of free, creative and inductive thinking:** Developing creative approaches to research design and applying inductive reasoning in data analysis

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Introduction to Research Methodology	2	2	4
2. Research Paradigms and Approaches	2	2	
3. Research Design	2	2	
4. Literature Review	2	2	
5. Quantitative Research Methods	2	2	
6. Qualitative Research Methods	2	2	
7. Mixed Methods Research	2	2	
8. Data Collection Techniques	2		2
9. Sampling Strategies	2	2	
10. Data Analysis	2		2
11. Validity and Reliability	2	2	
12. Research Ethics	2	2	4
13. Writing and Presenting Research	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous conference video-sessions,

	including breakout rooms for small-group interaction																
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: • teaching • communication with students																
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	• Personal computer or laptop • Stable internet connection • Headset and webcam for synchronous participation																
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin																
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.																
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160
Activity	Semester workload																
Lectures	26 hours																
Seminars	22 hours																
Fieldwork	12 hours																
Individual work	50 hours																
Group work	30 hours																
Preparatory reading for the exam	20 hours																
Course total	160																

STUDENT ASSESSMENT	Language of assessment - English	
Description of the assessment method	Formative and summative assessment	
Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other	Assessment methods: • Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.	
Specifically-defined evaluation criteria are given, and if and where they are accessible to students.		

5. RECOMMENDED BIBLIOGRAPHY

-Compulsory literature:

- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE.
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- Tashakkori, A., Johnson, R. B., & Teddlie, C. (2021). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences* (2nd ed.). SAGE.

Additional literature:

- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.
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- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic

Components of second cycle study outcomes description	Explanations
	activity). Ability to make innovative decisions, evaluating possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Research Methodology (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary knowledge of research methodology, including epistemological foundations, research paradigms, qualitative and quantitative approaches, data collection methods, analytical techniques, and ethical principles in educational research.
Ability to conduct research	Students can formulate research problems, design appropriate studies, select suitable methodologies, collect and analyze data using various techniques, critically evaluate existing literature, and draw evidence-based conclusions.
Special abilities	Students can design research instruments and tools, apply appropriate analytical methods, interpret findings, present results in structured formats, and connect theoretical frameworks with empirical evidence.
Social abilities	Students work effectively in research teams, demonstrate ethical responsibility in research conduct, respect participant rights, and communicate research ideas and findings clearly to diverse audiences.
Personal abilities	Students manage their own learning process in research methodology, reflect critically on their research decisions, acknowledge limitations, and make ethically informed decisions considering potential impacts on participants and educational communities.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of research methodology, including epistemological foundations, research paradigms, qualitative and quantitative approaches, data collection methods, analytical techniques, and ethical principles in educational research.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students can formulate research problems, design appropriate studies, select suitable methodologies, collect and analyze data using various techniques, critically evaluate existing literature, and draw evidence-based conclusions.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students can design research instruments and tools, apply appropriate analytical methods, interpret findings, present results in structured formats, and connect theoretical frameworks with empirical evidence.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students work effectively in research teams, demonstrate ethical responsibility in research conduct, respect participant rights, and communicate research ideas and findings clearly to diverse audiences.	Individual work, group work, consultations	Individual work, group work
5	Students manage their own learning process in research methodology, reflect critically on their research decisions, acknowledge limitations, and make ethically informed decisions considering potential impacts on participants and educational communities.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	10	*						0										
Group work	10	15	10	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	30	*												0				
Total:	-	100	100																	

Proforma - 1.3 Digital Skills and Social Media

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	1
COURSE TITLE		Digital Skills and Social Media	
CO-ORDINATING LECTURERS		<u>Dr Radovan Madlenak</u> , University of Zilina Dr Julija Melnikova, University of Klaipėda	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING in-person (%) synchronous distance learning (%)		Distance learning (100%) Synchronous (40%) - asynchronous (60%)	

asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to equip students with comprehensive digital competencies, ranging from foundational digital skills and online communication to advanced social media strategy, analytics, content creation, cybersecurity, media literacy, and ethical digital citizenship, so they can confidently and responsibly navigate, create, analyze, and manage digital content and social media in an AI-driven world. Students progressively develop practical abilities in using digital tools, planning and optimizing social media content, understanding platform algorithms, identifying misinformation, protecting digital privacy, and integrating data-driven insights into strategic decision-making. This foundation culminates in a final project synthesizing all theoretical and practical components to prepare them for effective and ethical digital engagement
SUMMARY	This course covers essential digital competencies, including foundational digital skills, online communication, safety, and responsible digital citizenship, while introducing students to content creation, social media platforms, and strategic content planning. Students also learn digital marketing fundamentals, social media analytics, influencer dynamics, and media literacy, applying these skills in a final data-driven, ethically grounded practical project.

2. LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Brief Guide for drafting Learning Outcomes

Upon completion of the course, students will be able to:

- Demonstrate proficiency in using key digital tools such as word processors, spreadsheets, and presentation software.
- Create and manage professional social media profiles across platforms like LinkedIn, Facebook, Instagram, and X (formerly Twitter).
- Develop and implement basic digital marketing strategies, including content planning and audience engagement.
- Practice safe and responsible digital citizenship, including online privacy, security, and ethical behavior.
- Design and publish multimedia content such as graphics, videos, and blog posts using digital tools like Canva or Adobe Express.
- Critically evaluate online information and digital media for credibility, bias, and reliability.

Students will develop:

- Digital literacy to navigate and utilize various online platforms and tools effectively.
- Critical thinking skills to assess the reliability and credibility of online content and sources.
- Content creation abilities, including writing, graphic design, and video editing for digital platforms.
- Social media management skills, including scheduling, engagement, and analytics interpretation.
- Online communication skills, adapting tone and style for different platforms and audiences.
- Understanding of digital marketing principles, such as branding, targeting, and campaign planning.
- Team collaboration skills through the use of digital tools for group projects and remote work.
- Awareness of digital ethics and online safety, including data privacy, cyberbullying, and intellectual property.
- Problem-solving skills using digital tools to address real-world tasks and challenges.
- Adaptability to emerging technologies, preparing for evolving trends in digital media and communication.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following general competences:

- Search, analysis and synthesis of data and information, with the use of the necessary technology: Locating and evaluating scientific literature, analyzing research data, synthesizing findings
- **Decision-making:** Selecting appropriate research designs, methodologies, and data collection approaches
- **Working independently:** Planning and conducting individual research projects throughout all stages
- **Team work:** Collaborating on research activities and understanding group research dynamics
- **Production of new research ideas:** Identifying research gaps and formulating original research questions
- **Project planning and management:** Designing research projects, managing timelines, organizing data collection phases
- **Respect for difference and multiculturalism:** Understanding diverse research perspectives and cultural contexts in educational settings
- **Showing social, professional and ethical responsibility:** Applying research ethics principles and maintaining integrity in research conduct
- **Criticism and self-criticism:** Evaluating research quality and reflecting on research decisions
- **Production of free, creative and inductive thinking:** Developing creative approaches to research design and applying inductive reasoning in data analysis

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Introduction to Digital Skills & the Role of Social Media	2	2	4
2. Basic Digital Tools & File Management	2	2	
3. Online Communication and Collaboration	2	2	
4. Introduction to Social Media Platforms	2	2	
5. Digital Safety, Privacy & Cybersecurity	2	2	
6. Responsible Digital Citizenship	2	2	
7. Content Creation Basics	2	2	
8. Social Media Content Planning	2		2
9. Introduction to Digital Marketing	2	2	
10. Social Media Analytics	2		2
11. Influencers, Trends & Algorithms	2	2	
12. Fake News & Media Literacy	2	2	4
13. Final Project Presentations & Course Review	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions,

	including breakout rooms for small-group interaction																
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students																
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation																
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin																
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.																
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160
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Seminars	22 hours																
Fieldwork	12 hours																
Individual work	50 hours																
Group work	30 hours																
Preparatory reading for the exam	20 hours																
Course total	160																

STUDENT ASSESSMENT	Language of assessment - English	
Description of the assessment method	Formative and summative assessment	
Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other	Assessment methods:	
Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	• Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.	

5. RECOMMENDED BIBLIOGRAPHY

-Compulsory literature:

- Chaffey, D., & Ellis-Chadwick, F. (2022). Digital marketing: Strategy, implementation and practice (8th ed.). Pearson Education.
- Kingsnorth, S. (2022). Digital marketing strategy: An integrated approach to online marketing (3rd ed.). Kogan Page.
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Additional literature:

- McWhorter, K. (2019). Practical skills for success: Digital literacy. Pearson Education.
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APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own

Components of second cycle study outcomes description	Explanations
	activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Digital Skills and Social Media (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	• Apply up-to-date knowledge of digital tools, social media platforms, content creation, analytics, digital safety, and citizenship to solve problems in unfamiliar digital environments. (e.g., use AI tools, digital communication frameworks, social media analytics) • Use contemporary approaches in digital marketing, algorithmic personalization, media literacy, and cybersecurity to address complex digital challenges and innovate within educational, professional, or social media contexts.
Ability to conduct research	• Analyze and synthesize data from social media analytics dashboards, eye-tracking outputs, heatmaps, sentiment analysis, fact-checking tools, and cybersecurity indicators to make informed decisions. • Evaluate alternative digital strategies using KPIs, A/B testing, trend forecasting, predictive analytics, and UX insights, even when information is incomplete. • Integrate multi-source digital research (platform analytics, verification tools, user behavior data) to justify design or communication decisions in complex situations.
Special abilities	• Develop, adapt, and apply digital tools, content creation workflows, and analytics frameworks (e.g., AI-assisted design, automation platforms, audience profiling models) to produce new solutions for digital communication, marketing, UX, safety, and media literacy. • Create original multimedia content, digital identities, social media strategies, and research-based digital projects by applying advanced methodological and technical skills (e.g., Canva, Firefly, AI-supported analytics, cloud collaboration systems). • Implement innovations in digital learning, digital wellbeing, misinformation mitigation, and ethical online communication by translating theoretical frameworks into practical digital outputs..

Components of second cycle study outcomes description	Explanations
Social abilities	• Communicate clearly, professionally, and argumentatively across digital platforms, adapting tone, clarity, and style based on audience and cultural context. • Collaborate effectively in teams using cloud platforms, shared calendars, automation systems, and digital communication tools while taking responsibility for both individual and group outcomes. • Engage responsibly in digital environments by practicing inclusivity, ethical behavior, privacy awareness, copyright respect, and critical evaluation of online information.
Personal abilities	• Independently plan and manage the learning process, identify areas for professional growth (e.g., mastering new tools, improving digital identity, adopting new AI-driven methods), and continue developing digital competencies autonomously. • Make innovative and ethically aware decisions in digital content creation, communication, safety, and media engagement, considering social, cultural, and environmental impacts. • Demonstrate strategic and systematic thinking by applying digital wellbeing practices, reflective evaluation methods, and continuous iteration in digital projects.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	• Apply up-to-date knowledge of digital tools, social media platforms, content creation, analytics, digital safety, and citizenship to solve problems in unfamiliar digital environments. (e.g., use AI tools, digital communication frameworks, social media analytics) • Use contemporary approaches in digital marketing, algorithmic personalization, media literacy, and cybersecurity to address complex digital challenges and innovate within educational, professional, or social media contexts.	Lectures, seminars, fieldwork, individual work, group work, preparatory reading, consultations	Individual work, group work, exam
2	• Analyze and synthesize data from social media analytics dashboards, eye-tracking outputs, heatmaps, sentiment analysis, fact-checking tools, and cybersecurity indicators to make informed decisions. • Evaluate alternative digital strategies using KPIs, A/B testing, trend forecasting, predictive analytics, and UX insights, even when information is incomplete. • Integrate multi-source digital research (platform analytics, verification tools, user behavior data) to justify design or communication decisions in complex situations.	Seminars, fieldwork, individual work, group work, preparatory reading, consultations	Individual work, group work, exam
3	• Develop, adapt, and apply digital tools, content creation workflows, and analytics frameworks (e.g., AI-assisted design, automation platforms, audience profiling models) to produce new solutions for digital communication, marketing, UX, safety, and media literacy. • Create original multimedia content, digital identities, social media strategies, and research-based digital projects by applying advanced	Seminars, fieldwork, individual work, group work, consultations	Individual work, group work

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
	methodological and technical skills (e.g., Canva, Firefly, AI-supported analytics, cloud collaboration systems). Implement innovations in digital learning, digital wellbeing, misinformation mitigation, and ethical online communication by translating theoretical frameworks into practical digital outputs..		
4	- Communicate clearly, professionally, and argumentatively across digital platforms, adapting tone, clarity, and style based on audience and cultural context. - Collaborate effectively in teams using cloud platforms, shared calendars, automation systems, and digital communication tools while taking responsibility for both individual and group outcomes. - Engage responsibly in digital environments by practicing inclusivity, ethical behavior, privacy awareness, copyright respect, and critical evaluation of online information.	Individual work, group work, consultations	Individual work, group work
5	- Independently plan and manage the learning process, identify areas for professional growth (e.g., mastering new tools, improving digital identity, adopting new AI-driven methods), and continue developing digital competencies autonomously. - Make innovative and ethically aware decisions in digital content creation, communication, safety, and media engagement, considering social, cultural, and environmental impacts. - Demonstrate strategic and systematic thinking by applying digital wellbeing practices, reflective evaluation methods, and continuous iteration in digital projects.	Individual work, group work, preparatory reading, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	10	*						0										
Group work	10	15	10	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	30	*												0				
Total:	-	100	100																	

Proforma - 1.4 AI-Powered Content Creation & Smart Educational Technologies

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	1
COURSE TITLE		AI-Powered Content Creation & Smart Educational Technologies	
CO-ORDINATING LECTURERS		<u>Dr. Jenny Pange</u> , University of Ioannina Dr. Eugenia Toki, University of Ioannina	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY TEACHING HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		SPECIAL BACKGROUND	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	

MODE OF TEACHING in-person (%) synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Distance learning (100%) Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to equip postgraduate students with the knowledge and skills to design, evaluate, and responsibly integrate pedagogical AI-powered tools and smart technologies in modern educational environments.
SUMMARY	This course covers AI-based pedagogical content creation, personalized and adaptive learning systems, virtual assistants, learning analytics, digital wellbeing, and ethical considerations in smart education.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes
Upon successful completion of the course, students will be able to: • Explain the key concepts and applications of smart educational technologies and AI-powered learning environments in higher and lifelong education. • Identify and evaluate digital and AI tools that enhance engagement, inclusion, and accessibility in diverse learning contexts. • Apply pedagogically sound strategies for selecting, integrating, and using educational technologies that align with specific teaching and learning goals.

- **Design** simple, technology-supported learning activities using adaptive platforms, virtual assistants, or interactive classroom tools.
- **Demonstrate awareness** of digital wellbeing, ethics, and privacy principles in the use of AI and smart systems within education.
- **Assess** how AI can support formative and summative assessment, feedback, and learning analytics while maintaining fairness and transparency.
- **Collaborate** using cloud-based platforms and learning management systems (LMS) to develop and share educational content.
- **Reflect critically** on their personal and professional digital competence, identifying strategies for continuous learning and responsible innovation in AI-powered education.

Students will develop:

- Analytical skills in evaluating emerging educational technologies.
- Practical competence in designing adaptive and data-informed learning experiences.
- Research abilities in learning analytics and technology assessment.
- Strategic thinking for digital transformation and educational innovation.
- Ethical and professional awareness regarding pedagogical AI use in education.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following competences:

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Adapting to new situations
- Decision-making

- Working independently
 - Team work
 - Working in an international environment
 - Working in an interdisciplinary environment
 - Production of new research ideas
 - Project planning and management
 - Respect for difference and multiculturalism
 - Showing social, professional and ethical responsibility and sensitivity to gender issues
 - Criticism and self-criticism
 - Production of free, creative and inductive thinking
- Others:
- Responsible use of AI-based technologies
 - Digital and information literacy in Human-Machine Interaction

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. The Modern Learning Environment	2	2	4
2. Personalised and Adaptive Learning	2	2	
3. Designing Inclusive and Accessible Learning	2	2	
4. Generative AI Tools for Educational Content Creation and Teaching Support	2	2	
5. Everyday Tools for Teachers	2	2	
6. Interoperability and Connected Systems	2	2	
7. Digital Wellbeing and AI	2	2	
8. Choosing the Right Tools	2		2
9. AI Assessment Strategies	2	2	
10. Understanding Analytics	2		2
11. Pedagogical Learning from Real Examples	2	2	

12. Planning for the Future - Didactics of Technologies	2	2	4
13. Microlearning Presentations and Reflection	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY	The use of Artificial Intelligence is allowed only with the permission of

(1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	the instructor, with explicit declaration and reference.																		
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> <tr> <td></td><td></td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160		
Activity	Semester workload																		
Lectures	26 hours																		
Seminars	22 hours																		
Fieldwork	12 hours																		
Individual work	50 hours																		
Group work	30 hours																		
Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: • Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.																		

5. RECOMMENDED BIBLIOGRAPHY

Compulsory literature:

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- McTear, M. (2022). Conversational AI: Dialogue systems, conversational agents, and chatbots. Springer. <https://doi.org/10.1007/978-3-031-02158-3>
- Norman, D. A. (2013). *The design of everyday things* (Revised and expanded ed.). Basic Books.
- Zhai, X. (2023). ChatGPT for teaching and learning: A critical review of opportunities and challenges. *Computers & Education: Artificial Intelligence*, 4, 100124. <https://doi.org/10.1016/j.caeai.2023.100124>

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own

Components of second cycle study outcomes description	Explanations
	activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject AI-Powered Content Creation & Smart Educational Technologies (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary and up-to-date knowledge of AI-powered content creation for education, smart educational technologies and platforms, adaptive systems, learning analytics, interoperability standards, accessibility frameworks, and principles for safe and effective integration into teaching and learning.
Ability to conduct research	Students can analyze and evaluate AI tools and smart educational technologies, interpret learning and usage data, synthesize evidence from research and practice, and make informed decisions about adoption, implementation, and evaluation in complex educational contexts.
Special abilities	Students can design AI-supported learning activities and content, select appropriate tools, integrate them into LMS-centric ecosystems, apply interoperability and accessibility principles, and plan small-scale pilots with appropriate evaluation indicators.
Social abilities	Students work effectively in interdisciplinary teams, communicate adoption rationales and evaluation findings to diverse stakeholders, demonstrate ethical responsibility in AI use, and support inclusive and learner-centered implementation.
Personal abilities	Students independently manage their learning and professional development, reflect critically on AI-supported pedagogy, demonstrate responsible judgment, and show strategic thinking about digital transformation and innovation in education.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of AI-powered content creation and smart educational technologies and apply it in teaching and learning contexts.	Lessons, seminars, practical workshops, case studies, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students analyze and evaluate AI tools, platforms, and learning/usage data to make evidence-informed adoption decisions.	Lessons, seminars, practical workshops, case studies, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students design AI-supported learning activities and content, ensuring alignment with learning outcomes, accessibility, and inclusion.	Lessons, seminars, practical workshops, case studies, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
4	Students collaborate effectively and communicate implementation and evaluation findings to stakeholders, demonstrating professional responsibility.	Lessons, seminars, practical workshops, case studies, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
5	Students reflect critically on pedagogical value, limitations, and risks, and apply ethical and responsible-AI principles in educational settings.	Lessons, seminars, practical workshops, case studies, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7- 9	10	10	*							0									
Group work	5-8	15	15	*						0										
Group work	9-12	15	15	*								0								
Individual work	10-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*												0				
Total:	-	100	100																	

Proforma - 1.5 Digital Pedagogy and Language in Digital Contexts

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	1
COURSE TITLE		Digital Pedagogy and language in digital contexts	
CO-ORDINATING LECTURERS		<u>Dr Nikoletta Tsitsanoudis</u> , University of Ioannina Dr. Themistoklis Gogas, University of Ioannina	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	

LANGUAGE OF INSTRUCTION AND OF ASSESSMENT	English
MODE OF TEACHING in-person (%) synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Distance learning (100%) Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to introduce students to the principles and practices of digital pedagogy in language education, focusing on how digital tools, online environments, and emerging technologies can support effective language teaching and learning.
SUMMARY	This course covers key topics such as digital literacies, language use in online spaces, multimodal learning, and the design of digital language lessons. It also explores communication, collaboration, assessment, accessibility, and the role of social media and emerging technologies in contemporary language education.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes Upon completion of the course, students will be able to:
--

- Understand key concepts of digital pedagogy and their application in language teaching and learning.
- Design and deliver language lessons using digital tools and platforms (e.g., Google Classroom, Moodle, Zoom).
- Evaluate and select appropriate digital resources for language teaching, including apps, websites, and multimedia content.
- Use digital tools to enhance student engagement, interaction, and collaboration in language learning environments.
- Integrate multimodal resources (text, audio, video, images) to support diverse learning styles and language competencies.
- Apply principles of inclusive and accessible digital language instruction, ensuring equity for all learners.
- Critically assess the role of language in digital communication, including tone, register, emoji use, and online discourse norms.
- Develop digital literacy and critical thinking skills relevant to language learning in online environments.
- Analyze the impact of social media, memes, and internet culture on contemporary language use and variation.
- Reflect on their own digital teaching practices and continuously adapt to new technologies and language trends.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following general competences:

- Search, analysis and synthesis of data and information, with the use of the necessary technology: Locating and evaluating scientific literature, analyzing research data, synthesizing findings

- **Decision-making:** Selecting appropriate research designs, methodologies, and data collection approaches
- **Working independently:** Planning and conducting individual research projects throughout all stages
- **Team work:** Collaborating on research activities and understanding group research dynamics
- **Production of new research ideas:** Identifying research gaps and formulating original research questions
- **Project planning and management:** Designing research projects, managing timelines, organizing data collection phases
- **Respect for difference and multiculturalism:** Understanding diverse research perspectives and cultural contexts in educational settings
- **Showing social, professional and ethical responsibility:** Applying research ethics principles and maintaining integrity in research conduct
- **Criticism and self-criticism:** Evaluating research quality and reflecting on research decisions
- **Production of free, creative and inductive thinking:** Developing creative approaches to research design and applying inductive reasoning in data analysis

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Introduction to Digital Pedagogy	2	2	4
2. Language in Digital Spaces	2	2	
3. Digital Literacies for Educators and Learners	2	2	
4. Tools for Digital Language Teaching	2	2	
5. Designing Digital Language Lessons	2	2	
6. Multimodal Learning and Language Acquisition	2	2	
7. Communication and Collaboration in Online Language Learning	2	2	
8. Assessment and Feedback in Digital Language Classrooms	2		2
9. Accessibility and Inclusive Digital Pedagogy	2	2	
10. Language, Identity, and Online Culture	2		2
11. Social Media and Language Learning	2	2	

12. Emerging Technologies in Language Education	2	2	4
13. Final Projects and Course Reflection	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY	The use of Artificial Intelligence is allowed only with the permission of

(1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	the instructor, with explicit declaration and reference.																		
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> <tr> <td></td><td></td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160		
Activity	Semester workload																		
Lectures	26 hours																		
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Fieldwork	12 hours																		
Individual work	50 hours																		
Group work	30 hours																		
Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: • Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.																		

5. RECOMMENDED BIBLIOGRAPHY

-Compulsory literature:

- Tsitsanoudis - Mallidis, N. (2022). Greek Media Discourse. From reconstitution of democracy to the memorandums of understanding. Transformations and symbolism. Harvard University Press.
- Van Dijck, J. (2013). The Culture of Connectivity: A Critical History of Social Media. Oxford University Press.

-Additional literature:

- Selwyn, N. (2021). Education and Technology: Key Issues and Debates. Bloomsbury.
- Prevelakis, N. & N. Tsitsanoudis - Mallidis (2022). Foboglossa. Athens: Kastaniotis.
- Lankshear, C., & Knobel, M. (2015). Digital Literacy and Digital Literacies. Peter Lang.
- Huang, J. & N. Tsitsanoudis-Mallidis (eds.) (2013). Empirical Language Research. Letting the Data Speak for Themselves. New York: Untested Ideas Research Center.

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating

Components of second cycle study outcomes description	Explanations
	possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Digital Pedagogy and Language in Digital Contexts (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire theoretical knowledge of digital pedagogy, digital literacies, multimodal learning, and language use in online environments, and apply this knowledge in the design and implementation of digital language teaching practices.
Ability to conduct research	Students develop the ability to critically explore and evaluate digital tools, emerging technologies, and online learning environments, using research-informed approaches to improve language teaching and learning.
Special abilities	Students develop specialized skills in using digital tools and platforms, designing digital language lessons, integrating multimodal resources, and implementing digital assessment and feedback strategies.
Social abilities	Students strengthen their ability to facilitate communication and collaboration in online learning environments while promoting inclusive, accessible, and culturally aware language learning practices.
Personal abilities	Students enhance their critical thinking, reflection, and adaptability in relation to digital pedagogy, language, identity, and online culture, while developing professional responsibility in technology-enhanced language education.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire theoretical knowledge of digital pedagogy, digital literacies, multimodal learning, and language use in online environments, and apply this knowledge in the design and implementation of digital language teaching practices.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students develop the ability to critically explore and evaluate digital tools, emerging technologies, and online learning environments, using research-informed approaches to improve language teaching and learning.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students develop specialized skills in using digital tools and platforms, designing digital language lessons, integrating multimodal resources, and implementing digital assessment and feedback strategies.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students strengthen their ability to facilitate communication and collaboration in online learning environments while promoting inclusive, accessible, and culturally aware language learning practices.	Individual work, group work, consultations	Individual work, group work
5	Students enhance their critical thinking, reflection, and adaptability in relation to digital pedagogy, language, identity, and online culture, while developing professional responsibility in technology-enhanced language education.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	10	*						0										
Group work	10	15	10	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	30	*												0				
Total:	-	100	100																	

Proforma - 2.1 AI and Gamification in Education

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	2
COURSE TITLE		AI and Gamification in Education	
CO-ORDINATING LECTURERS		Dr. Zoi Nikiforidou, University of Ioannina Dr. Agostino Marengo, University of Foggia	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY TEACHING HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING in-person (%)		Distance learning (100%)	

synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to explore theoretical, practical and research-based aspects of gamification in education.
SUMMARY	This course covers areas of game dynamics, aesthetics, mechanics, theories and research findings on the challenges and benefits of applying gamification in the learning process. Ethical considerations, analytics, design and prototyping are covered. The course ends with students' own creative playtesting.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes
Upon completion of the course, students will be able to: • Demonstrate highly specialised knowledge, in the field of gamification and AI in Education, as the basis for original thinking and/or research • Design, create, measure and critically review aspects and elements of gamification • Apply critical awareness of knowledge, theory and practice in the field and at the interface between different fields Students will develop: • Advanced Knowledge: Deep understanding of principles and praxis of gamification in Education

- **Research Skills:** Competence in qualitative and/or mixed-methods approaches
- **Practical Competences:** Designing critical, inclusive, and innovative digital learning projects based on gamification.
- **Professional Skills:** Ability to engage with interdisciplinary debates and apply theory to practice
- **Team collaboration skills:** through the use of digital tools for group projects and remote work.
- **Problem-solving skills** using digital tools to address real-world tasks and challenges.
- **Adaptability** to emerging technologies, preparing for evolving trends in gamification in the educational context.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	
Production of new research ideas	Other

The course aims to develop the following general competences:

- **Search, analysis and synthesis of data and information, with the use of the necessary technology:** Locating and evaluating scientific literature, analyzing research data, synthesizing findings
- **Decision-making:** Selecting appropriate research designs, methodologies, and data collection approaches
- **Working independently:** Planning and conducting individual research projects throughout all stages
- **Team work:** Collaborating on research activities and understanding group research dynamics

- **Production of new research ideas:** Identifying research gaps and formulating original research questions
- **Project planning and management:** Designing research projects, managing timelines, organizing data collection phases
- **Respect for difference and multiculturalism:** Understanding diverse research perspectives and cultural contexts in educational settings
- **Showing social, professional and ethical responsibility:** Applying research ethics principles and maintaining integrity in research conduct
- **Criticism and self-criticism:** Evaluating research quality and reflecting on research decisions
- **Production of free, creative and inductive thinking:** Developing creative approaches to research design and applying inductive reasoning in data analysis

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Gamification and digital pedagogy in education	2	2	4
2. Theories of learning and motivation fundamentals	2	2	
3. The Octalysis framework	2	2	
4. Game Dynamics, Aesthetics and Mechanics & learning objectives	2	2	
5. Pedagogical narrative design and storytelling for learning	2	2	
6. Designing for flow, challenge, and skill	2	2	
7. Onboarding, progression, and feedback systems	2	2	
8. Analytics and measurement for gamification	2		2
9. Case studies in education and aspects of didactics	2	2	
10. Ethical considerations and dark patterns	2		2
11. AI enhanced personalization and nudging in learning	2	2	
12. Rapid prototyping workshop and microlearning	2	2	4
13. Playtesting and peer-review	2	2	

Total: 60 hours	26	22	12
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4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.

(3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence																			
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> <tr> <td></td><td></td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160		
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Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: - Exams 30% - Individual work 40% - Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.																		

5. RECOMMENDED BIBLIOGRAPHY

-Compulsory literature:

- Werbach, K., & Hunter, D. (2012). *For the Win: How Game Thinking Can Revolutionize Your Business*. Wharton Digital Press.
- Kapp, K. (2012). *The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education*. San Francisco, CA: Pfeiffer.
- Chou, Y.-K. (2014). *Actionable Gamification: Beyond Points, Badges, and Leaderboards*, Octalysis Media.
- Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education*, 14(1), 9. <https://doi.org/10.1186/s41239-017-0042-5>
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work?—A literature review of empirical studies on gamification. *Proceedings of the 47th Hawaii International Conference on System Sciences*, 3025-3034. <https://doi.org/10.1109/HICSS.2014.377>
- Cheng, C., L. Wang, H. Xie, and L. Yan. (2023). "Mapping Digital Innovation: A Bibliometric Analysis and Systematic Literature Review." *Technological Forecasting and Social Change* 194:122706. <https://doi.org/10.1016/j.techfore.2023.122706>.
- Dichev, C., C Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational*
- Murugan, T., Periasamy, K., C Abirami, A. M. (2025). *Adopting Artificial Intelligence Tools In Higher Education: Teaching And Learning*. Routledge

-Additional literature

- Deterding, S., Dixon, D., Khaled, R., & Nacke, L (2011). From Game Design Elements to Gamefulness: Defining Gamification. In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments* (pp. 9-15). ACM
- Liu, W., Chen, L., Zhong, X., Liu, W., Chen, X., & Wang, C. (2025). Thinking outside the box: a systematic review of gamification trends in children's dance education. *Research in Dance Education*, 1-30. <https://doi.org/10.1080/14647893.2025.2570912>
- Murugan, T., Periasamy, K., & Abirami, A. M. (2025). *Adopting Artificial Intelligence Tools In Higher Education: Teaching And Learning*. Routledge

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APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating

Components of second cycle study outcomes description	Explanations
	possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject AI and Gamification in Education (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary knowledge of theory and research on gamification.
Ability to conduct research	Students can formulate research problems, design appropriate games, select suitable methodologies, critically evaluate existing literature, and draw evidence-based conclusions.
Special abilities	Students can design their own games and engage with playtesting and critical reflection
Social abilities	Students work effectively in research teams, demonstrate ethical responsibility in research conduct, respect participant rights, and communicate research ideas and findings clearly to diverse audiences.
Personal abilities	Students manage their own learning process,, reflect critically on their research decisions, acknowledge limitations, and make ethically informed decisions considering potential impacts on participants and educational communities.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of theory and research on gamification.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students can formulate research problems, design appropriate games, select suitable methodologies, critically evaluate existing literature, and draw evidence-based conclusions.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students can design their own games and engage with playtesting and critical reflection	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students work effectively in research teams, demonstrate ethical responsibility in research conduct, respect participant rights, and communicate research ideas and findings clearly to diverse audiences.	Individual work, group work, consultations	Individual work, group work
5	Students manage their own learning process,, reflect critically on their research decisions, acknowledge limitations, and make ethically informed decisions considering potential impacts on participants and educational communities.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	15	*						0										
Group work	10	15	15	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*												0				
Total:	-	100	100																	

Proforma - 2.2 AI in Learning Design, Analytics, and Decision-Making

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	2
COURSE TITLE		AI in Learning Design, Analytics, and Decision-Making	
CO-ORDINATING LECTURERS		<u>Julija Melnikova</u> , University of Klaipėda Vito Santamato, University of Foggia	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING			

in-person (%) synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Distance learning (100%) Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to equip students with the knowledge and practical skills needed to apply artificial intelligence in learning design, learning analytics, and evidence-based educational decision-making. The course develops competencies in AI-enhanced instructional design, data literacy, predictive analytics, ethical reasoning, and data-driven governance in educational contexts.
SUMMARY	This course covers the application of artificial intelligence across three integrated areas: learning design, learning analytics, and data-driven decision-making. Students explore AI foundations, instructional design and learning experience design (LXD), AI in teaching practice, ethical and policy considerations, data literacy, predictive and prescriptive analytics, AI-supported educational leadership, and project-based integration of course concepts. Through lectures, seminars, labs, and group projects, students gain hands-on experience with AI tools and develop the capacity to make evidence-based educational decisions.

2. LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area

- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Brief Guide for drafting Learning Outcomes

Upon completion of the course, students will be able to:

- Critically explain key concepts in AI in education, learning design, and learning analytics.
- Evaluate AI systems used for personalization, assessment, prediction, early alert, and instructional decision-making.
- Analyze ethical, legal, and governance issues including bias, transparency, explainability, and data protection.
- Understand core principles of data literacy, learning analytics (descriptive, predictive, and prescriptive), and data-informed decision-making applied to educational contexts.

Skills

- Design AI-enhanced learning activities using current instructional design frameworks (ADDIE, LXD) and design-based research (DBR) approaches.
- Use learning analytics tools (dashboards, predictive models, visualization techniques) to interpret learner data.
- Conduct small-scale empirical research using qualitative and/or mixed-methods to evaluate AI-enhanced learning experiences.
- Apply learning analytics tools and platforms to explore, interpret, and critically assess educational datasets and learner indicators.
- Interpret learning analytics dashboards and data visualisations to communicate findings and support evidence-based decisions for stakeholders.

Competences

- Make informed pedagogical decisions based on evidence from analytics and AI-supported insights.
- Collaborate in interdisciplinary teams to design innovative digital learning solutions.
- Demonstrate responsible, inclusive, and ethical approaches to AI adoption in educational settings.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology

Project planning and management

Respect for difference and multiculturalism

Adaptability to new situations

Respect for the natural environment

Decision-making

Working independently

Team work	Showing social, professional and ethical responsibility and sensitivity to gender issues
Working in an international environment	
Working in an interdisciplinary environment	Criticism and self-criticism
Production of new research ideas	Production of free, creative and inductive thinking
	Other

The course aims to develop the following general competences:

- **Search, analysis and synthesis of data and information, with the use of the necessary technology:** Locating and evaluating AI tools and educational research, analysing learner data with analytics platforms, synthesising findings to inform learning design
- **Decision-making:** Selecting appropriate AI-enhanced learning designs, analytics methods, and data-driven decision-making strategies
- **Working independently:** Planning and conducting individual AI-based educational projects from design through data analysis to evidence-based recommendations
- **Team work:** Collaborating on AI-enhanced learning design and analytics projects in interdisciplinary teams
- **Production of new research ideas:** Identifying gaps in AI-enhanced education and formulating original questions about learning design, analytics, and ethical AI use
- **Project planning and management:** Designing AI-based educational projects, managing timelines, organising data collection and analytics phases
- **Respect for difference and multiculturalism:** Engaging with diverse perspectives on AI in education across cultural, institutional, and international contexts
- **Showing social, professional and ethical responsibility:** Applying AI ethics principles (fairness, transparency, privacy) and maintaining integrity in educational technology use
- **Criticism and self-criticism:** Evaluating AI tools and analytics outputs critically, reflecting on design and analytical decisions
- **Production of free, creative and inductive thinking:** Developing creative approaches to AI-enhanced learning design and data-driven educational improvement, applying inductive reasoning in educational data analysis and leveraging AI for innovative problem-solving.

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Foundations of AI in Education	2	2	4
2. Instructional Design & AI	2	2	
3. Learning Experience Design (LXD) & AI	2	2	
4. AI in Teaching Practice	2	2	
5. Ethics, Bias, and Fairness in AI	2	2	
6. Policy & Regulation of AI in Education	2	2	
7. Introduction to Learning Analytics	2	2	
8. Data Literacy for Educators	2		2
9. Predictive & Prescriptive Analytics	2	2	
10. AI in Educational Leadership & Decision-Making	2	2	
11. Labs & AI-Based Project Design	2		2
12. Integration & Future Directions	2	2	4
13. Presentation of Group Projects & Critical Reflection	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the	Communication mode among students may include: Structured team-based assignments and collaborative group projects

use of AI, video conference, QA sessions, κ.α.	• Synchronous video-conference sessions, including breakout rooms for small-group interaction								
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: • teaching (including AI tools, learning analytics platforms, and data visualisation software) • communication with students • laboratory training (learning analytics platforms, AI tools, data visualisation tools)								
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	• Personal computer or laptop • Stable internet connection • Headset and webcam for synchronous participation								
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin								
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.								
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours
Activity	Semester workload								
Lectures	26 hours								
Seminars	22 hours								
Fieldwork	12 hours								

teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	Individual work	50 hours
	Group work	30 hours
	Preparatory reading for the exam	20 hours
	Course total	160
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: • Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.	

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- Ifenthaler, D., Widanapathirana, C. (2014). Development and Validation of a Learning Analytics Framework: Two Case Studies Using Support Vector Machines. *Technology, Knowledge and Learning*, 19/1-2, 221-240. Prieiga internete: <http://dx.doi.org/10.1007/s10758-014-9226-4>.
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- UNESCO (2022). Recommendation on the Ethics of Artificial Intelligence. Paris: UNESCO.
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APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating

Components of second cycle study outcomes description	Explanations
	possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject AI in Learning Design, Analytics, and Decision-Making (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary knowledge of AI in education, including foundational AI concepts, instructional and learning experience design frameworks, learning analytics, data literacy, ethical and policy dimensions of educational AI, and evidence-based decision-making in educational contexts.
Ability to conduct research	Students can evaluate AI tools and systems used in learning design, analytics, and decision-making, critically assess learning analytics data, interpret predictive models, and draw evidence-based conclusions to support educational improvement.
Special abilities	Students can design AI-enhanced learning activities using instructional design frameworks (ADDIE, LXD), apply learning analytics tools and dashboards, interpret educational datasets, and present data-driven findings in structured formats.
Social abilities	Students work effectively in interdisciplinary teams on AI-based educational projects, demonstrate ethical responsibility in AI adoption, respect learner data rights, and communicate findings on AI in education clearly to diverse stakeholders.
Personal abilities	Students manage their own learning process in AI-enhanced education, reflect critically on the ethical and pedagogical implications of AI use, acknowledge the limitations of AI systems, and make informed decisions considering impacts on learners and educational communities.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of AI in education, including foundational AI concepts, instructional and learning experience design frameworks, learning analytics, data literacy, ethical and policy dimensions of educational AI, and evidence-based decision-making in educational contexts.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students can evaluate AI tools and systems used in learning design, analytics, and decision-making, critically assess learning analytics data, interpret predictive models, and draw evidence-based conclusions to support educational improvement.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students can design AI-enhanced learning activities using instructional design frameworks (ADDIE, LXD), apply learning analytics tools and dashboards, interpret educational datasets, and present data-driven findings in structured formats.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students work effectively in interdisciplinary teams on AI-based educational projects, demonstrate ethical responsibility in AI adoption, respect learner data rights, and communicate findings on AI in education clearly to diverse stakeholders.	Individual work, group work, consultations	Individual work, group work
5	Students manage their own learning process in AI-enhanced education, reflect critically on the ethical and pedagogical implications of AI use, acknowledge the limitations of AI systems, and make informed decisions considering impacts on learners and educational communities.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	15	*						0										
Group work	10	15	15	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*															0	
Total:	-	100	100																	

Proforma - 2.3 Internet Safety – AI Ethics

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	2
COURSE TITLE		Internet safety - AI ethics	
CO-ORDINATING LECTURERS		<u>Dr. Vasiliki Liagou</u> , University of Ioannina Dr. Agostino Marengo, University of Foggia	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING in-person (%) synchronous distance learning (%)		Distance learning (100%) Synchronous (40%) - asynchronous (60%)	

asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to provide students with a comprehensive understanding of cybersecurity, data protection, and responsible digital practices, with an emphasis on ethical technology use, privacy protection, and safe communication in digital environments.
SUMMARY	This course covers the contemporary threat landscape, basic cyber hygiene practices, authentication and device security, as well as key principles of privacy protection including GDPR, data classification, consent, and retention policies. It also explores ethics, fairness and bias, transparency, content integrity and deepfake detection, as well as incident response, digital wellbeing, and policy development through case studies and practical exercises.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes
Upon completion of the course, students will be able to: • Apply GDPR and institutional policies to protect personal data and ensure lawful, fair, and transparent automated processing. • Identify risks of AI systems, including bias, misuse, and vulnerabilities across the AI lifecycle.

- Evaluate AI tools for transparency, fairness, accountability, and compliance with frameworks such as the EU AI Act and NIST AI RMF.
- Use practical tools and standards, such as ALTAI, MITRE ATLAS, and open-source adversarial testing frameworks, to assess the safety, security, and ethical implications of AI systems.
- Map AI trustworthiness characteristics to major policy documents and taxonomies, analysing how concepts such as robustness, safety, transparency, and accountability are defined across frameworks (EU AI Act, NIST AI RMF, OECD principles).
- Design responsible-use guidelines, consent workflows, and data-minimisation practices tailored to educational settings.
- Promote digital wellbeing and safe online practices for students and educators.
- Respond to incidents effectively, including reporting, mitigation steps, and basic AI risk assessment.
- Communicate AI-related risks, safeguards, and ethical considerations clearly to diverse audiences.

Students will develop:

Advanced Knowledge

Students will gain a deep understanding of:

- Core components of AI systems—data, models, infrastructure, and human actors—and the AI lifecycle, including potential vulnerabilities at each stage.
- AI governance and trustworthiness frameworks, including NIST AI RMF, OECD principles, and ISO/IEC standards.
- The AI threat landscape, covering both technical attacks (e.g., data poisoning, model evasion, inversion) and socio-technical risks (bias, unfairness, manipulation, lack of transparency).
- Key legal and regulatory frameworks, such as the EU AI Act, GDPR, and major cybersecurity legislation relevant to AI deployment.
- The role of AI in modern internet and educational environments, including search engines, social media algorithms, recommender systems, and digital learning platforms.

Research Skills

Students will develop competence in qualitative, analytical, and mixed-methods approaches to:

- Examine AI systems, online safety issues, and their educational impacts.
- Collect, interpret, and synthesise evidence on AI trustworthiness, fairness, and safety using established taxonomies and policy frameworks.
- Develop research-informed arguments and structured analyses of AI use cases, integrating technical, ethical, legal, and educational perspectives.

Practical Competences

Students will gain practical skills to:

- Apply GDPR and institutional policies to ensure lawful, transparent, and ethical processing of personal data in educational and online contexts.

- Conduct structured AI risk assessments across the AI lifecycle, identifying assets, threats, vulnerabilities, and potential mitigations.
- Evaluate AI systems for trustworthiness—robustness, accuracy, explainability, privacy, and fairness—using established frameworks (NIST, OECD, EU AI Act).
- Use practical tools and standards such as ALTAI, MITRE ATLAS, and adversarial testing frameworks to assess AI safety, security, and ethical implications.
- Design responsible-use guidelines, including consent workflows, data-minimisation strategies, and secure AI deployment practices that promote digital wellbeing and inclusive learning environments.

Professional Skills

Students will develop the ability to:

- Analyse real-world AI use cases, assess regulatory compliance, and map risks to trustworthiness frameworks to propose effective technical, ethical, and organizational controls.
- Engage in interdisciplinary debates and critically discuss complex or controversial AI issues, integrating technical, ethical, legal, and societal perspectives.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following competences:

- Effective search, analysis, and synthesis of data using digital and AI-related tools.
- Adaptation to new technological and regulatory developments in AI and online education.
- Informed decision-making based on ethical, legal, and risk-assessment considerations.

- Independent and team-based work, especially in analysing AI use cases and developing safe-use guidelines.
- Ability to work in interdisciplinary and international contexts, integrating technical, legal, and educational perspectives.
- Generation of innovative ideas related to AI safety, trustworthiness, and educational applications.
- Project planning and management for AI-focused analyses and group assignments.
- Respect for diversity and awareness of algorithmic fairness in educational environments.
- Ethical responsibility and professionalism in handling data and evaluating AI tools.
- Constructive criticism and self-reflection when assessing AI systems and personal assumptions.
- Creative and inductive thinking for solving complex socio-technical challenges involving AI

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Threat Landscape and Basic Cyber Hygiene	2	2	4
2. Passwords, Authentication, and Device Security	2	2	
3. Privacy by Design and GDPR Essentials	2	2	
4. Data Classification, Consent, and Retention Policies	2	2	
5. AI Ethics Fundamentals, Fairness, and Bias	2	2	
6. Transparency, Explainability, and Documentation	2	2	
7. Content Integrity, Deepfakes, and Detection	2	2	
8. Platform Policies and Age Appropriate Design	2		2
9. Incident Response, Reporting, and Mitigation	2	2	
10. Digital Wellbeing and Safe Communication	2		2
11. Staff Training and Accountability Structures	2	2	
12. Case Studies and Tabletop Exercises	2	2	4
13. Policy Drafting Workshop	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.

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Activity	Semester workload																		
Lectures	26 hours																		
Seminars	22 hours																		
Fieldwork	12 hours																		
Individual work	50 hours																		
Group work	30 hours																		
Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: • Exams 30% • Individual work 40% • Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.																		

5. RECOMMENDED BIBLIOGRAPHY

Compulsory literature:

- **ENISA. (2023, March 14).** Cybersecurity of AI and standardisation. European Union Agency for Cybersecurity. <https://www.enisa.europa.eu/publications/cybersecurity-of-ai-and-standardisation>
- **ENISA. (2023).** *Guidelines on Security Measures for Education.* European Union Agency for Cybersecurity. <https://www.enisa.europa.eu>
- **European Data Protection Board (EDPB). (2022).** *Guidelines on Data Protection in Education.*
- **UNESCO. (2023).** *Guidance on Generative AI in Education and Research.* United Nations Educational, Scientific and Cultural Organization. <https://www.unesco.org>
- **Floridi, L. (2013).** *The Ethics of Information.* Oxford University Press.
- **NIST. (2023).** *Artificial Intelligence Risk Management Framework (AI RMF).* National Institute of Standards and Technology. <https://www.nist.gov/ai>
- **Ismail, O., & Ahmad, N. (2025).** Ethical and Governance Frameworks for Artificial Intelligence: A Systematic Literature Review. *International Journal of Interactive Mobile Technologies (iJIM)*, 19(14), pp. 121-136. <https://doi.org/10.3991/ijim.v19i14.5698>

Additional literature:

- **Jedličková, Anetta.** "Ethical considerations in Risk management of autonomous and intelligent systems" *Ethics & Bioethics*, vol. 14, no. 1-2, University of Prešov, 2024, pp. 80-95. <https://doi.org/10.2478/ebce-2024-0007>

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating

Components of second cycle study outcomes description	Explanations
	possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Internet Safety - AI Ethics (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire knowledge of cybersecurity fundamentals, privacy protection, AI ethics, and digital safety, and apply these principles to identify risks, protect data, and promote responsible digital practices.
Ability to conduct research	Students develop the ability to critically analyze cybersecurity threats, privacy frameworks, and ethical challenges related to AI and digital platforms through case studies and evidence-based approaches.
Special abilities	Students gain practical skills in cyber hygiene, authentication and device security, data classification and protection, incident response procedures, and the detection of misinformation and deepfakes.
Social abilities	Students strengthen their ability to promote safe communication, digital wellbeing, and responsible use of digital platforms while supporting ethical standards and age-appropriate digital environments.
Personal abilities	Students enhance their critical thinking, ethical awareness, and professional responsibility in managing digital risks, protecting privacy, and contributing to the development of effective digital policies and practices.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire knowledge of cybersecurity fundamentals, privacy protection, AI ethics, and digital safety, and apply these principles to identify risks, protect data, and promote responsible digital practices.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students develop the ability to critically analyze cybersecurity threats, privacy frameworks, and ethical challenges related to AI and digital platforms through case studies and evidence-based approaches.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students gain practical skills in cyber hygiene, authentication and device security, data classification and protection, incident response procedures, and the detection of misinformation and deepfakes.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students strengthen their ability to promote safe communication, digital wellbeing, and responsible use of digital platforms while supporting ethical standards and age-appropriate digital environments.	Individual work, group work, consultations	Individual work, group work
5	Students enhance their critical thinking, ethical awareness, and professional responsibility in managing digital risks, protecting privacy, and contributing to the development of effective digital policies and practices.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	15	*						0										
Group work	10	15	15	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*												0				
Total:	-	100	100																	

Proforma - 2.4 Systemic Studies and Applications of Gamification

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	2
COURSE TITLE		Systemic Studies and Applications of Gamification	
CO-ORDINATING LECTURERS		<u>Dr. Jenny Pange</u> , University of Ioannina Dr. Nikitas Assimakopoulos, University of Piraeus Dr. Nikolaos Fachantidis, University of Macedonia Dr. Vito Santamato, University of Foggia	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	

LANGUAGE OF INSTRUCTION AND OF ASSESSMENT	English
MODE OF TEACHING in-person (%) synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Distance learning (100%) Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to introduce students to systems theory and systems thinking and explore their applications in digital learning, artificial intelligence, and gamification.
SUMMARY	This course covers the fundamental principles of systems thinking, system behavior, and system dynamics, as well as methods such as dynamic simulation modelling and their use in educational and digital learning environments. It also explores the integration of systems thinking with business and innovation through topics such as gamification business models, the Business Model Canvas, EdTech markets, and the commercialization of AI and digital learning technologies.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
--

- Brief Guide for drafting Learning Outcomes

Upon completion of the course, students will be able to:

Knowledge

- Understand gamification as a complex socio-technical system
- Critically analyse systemic models of motivation, feedback, and user engagement.

Skills

- Apply systemic thinking and design methodologies to model and prototype gamified systems.
- Use digital tools, analytics, and frameworks
- Conduct empirical evaluations using mixed methods (qualitative and quantitative).

Competences

- Lead multidisciplinary teams in the design and deployment of strategies.
- Reflect critically on the systemic implications in policy, ethics, and innovation.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The course aims to develop the following competences:

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Adapting to new situations
- Decision-making
- Working independently

- Team work
 - Working in an international environment
 - Working in an interdisciplinary environment
 - Production of new research ideas
 - Project planning and management
 - Respect for difference and multiculturalism
 - Showing social, professional and ethical responsibility and sensitivity to gender issues
 - Criticism and self-criticism
 - Production of free, creative and inductive thinking
- Others:
- Responsible use of AI-based technologies
 - Digital and information literacy in Human-Machine Interaction

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Introduction to systems theory and Thinking	2	2	4
2. Introduction to principles of Systems Thinking	2	2	
3. Fundamentals of Systems behavior	2	2	
4. Understanding System Dynamics	2	2	
5. Development of System Dynamics	2	2	
6. Systems Thinking In digital learning and AI	2	2	
7. Dynamic Simulation Modelling for Gamification	2	2	
8. Business Model for Gamification	2		2
9. The Business Model Canvas & Systems Thinking Together	2	2	
10. EdTech and e-learning markets	2		2
11. Commercialization of AI & Gamified Learning Tools	2	2	
12. Commercialization of AI & Edtech	2	2	4

13. Students' Project Presentations and Course Review	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used for: - teaching - communication with students
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	- Personal computer or laptop - Stable internet connection - Headset and webcam for synchronous participation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.

(2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence																			
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> <tr> <td></td><td></td></tr> </tbody> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160		
Activity	Semester workload																		
Lectures	26 hours																		
Seminars	22 hours																		
Fieldwork	12 hours																		
Individual work	50 hours																		
Group work	30 hours																		
Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: - Exams 30% - Individual work 40% - Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.																		

5. RECOMMENDED BIBLIOGRAPHY

Compulsory literature:

- Assimakopoulos, N. A. & Theocharopoulos, J. (2009). The Design and Control Systemic Methodology (DCSYM): a multi-agent modelling and operation platform. *International Journal of Applied Systemic Studies*, 2 (3), 193-217.
- Varsos, D. S., & Assimakopoulos, N. A. (2018). Viability and change in the 21st century organisation: a cybernetic perspective. *International Journal of Applied Systemic Studies*, 8(2), 119-150.
- Jackson, M. C. (2019). *Critical systems thinking and the management of complexity*. Wiley.
- Meadows, D. H. (2008). *Thinking in systems: A primer*. Chelsea Green Publishing.
- Midgley, G. (2023). *Systemic intervention: Philosophy, methodology, and practice* (2nd ed.). Springer.
- Kapp, K. M. (2020). *The gamification of learning and instruction* (2nd ed.). Wiley.

Additional literature:

- Sterman, J. D. (2000). *Business dynamics: Systems thinking and modeling for a complex world*. Boston, MA: McGraw-Hill.
- Varsos, D. S., & Assimakopoulos, N. A. (2016). A systems approach to alternative paradigms for organisation and organisational change. *International Journal of Applied Systemic Studies*, 6(4), 302-326.
- Wirtz, B. W. (2023). *Business model management: Design, instruments, success factors* (3rd ed.). Springer.
- Iansiti, M., & Lakhani, K. R. (2020). *Competing in the age of AI*. Harvard Business Review Press.
- Tidd, J., & Bessant, J. (2021). *Managing innovation* (7th ed.). Wiley.

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating

Components of second cycle study outcomes description	Explanations
	possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Systemic studies and Applications of Gamification (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire knowledge of systems theory, systems thinking, and system dynamics, and apply these concepts to analyze complex systems in digital learning, artificial intelligence, and gamified educational environments.
Ability to conduct research	Students develop the ability to investigate and critically analyze systems-based approaches in education and technology, exploring applications of system dynamics, simulation modelling, and innovation in EdTech markets.
Special abilities	Students gain specialized skills in applying systems thinking tools, dynamic simulation modelling, and business frameworks such as the Business Model Canvas to the development and evaluation of AI-driven and gamified learning solutions.
Social abilities	Students strengthen their ability to collaborate, exchange ideas, and present system-based solutions and projects related to digital learning, AI, and educational innovation.
Personal abilities	Students enhance their critical thinking, problem-solving, and reflective skills, enabling them to approach complex technological and educational challenges from a systems perspective and adapt to emerging developments in EdTech.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire knowledge of systems theory, systems thinking, and system dynamics, and apply these concepts to analyze complex systems in digital learning, artificial intelligence, and gamified educational environments.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students develop the ability to investigate and critically analyze systems-based approaches in education and technology, exploring applications of system dynamics, simulation modelling, and innovation in EdTech markets.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students gain specialized skills in applying systems thinking tools, dynamic simulation modelling, and business frameworks such as the Business Model Canvas to the development and evaluation of AI-driven and gamified learning solutions.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students strengthen their ability to collaborate, exchange ideas, and present system-based solutions and projects related to digital learning, AI, and educational innovation.	Individual work, group work, consultations	Individual work, group work
5	Students enhance their critical thinking, problem-solving, and reflective skills, enabling them to approach complex technological and educational challenges from a systems perspective and adapt to emerging developments in EdTech.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	15	*						0										
Group work	10	15	15	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*												0				
Total:	-	100	100																	

Proforma - 2.5 Human–Machine Interaction and Virtual Assistants

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	2
COURSE TITLE		Human-Machine Interaction and Virtual Assistants	
CO-ORDINATING LECTURERS		Dr. Eugenia Toki, University of Ioannina Dr. Radovan Madlenak, University of Zilinia	
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY TEACHING HOURS	CREDITS
Lectures, seminars, field work		4	6 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING in-person (%)		Distance learning (100%)	

synchronous distance learning (%) asynchronous distance learning (%) (In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	Synchronous (40%) - asynchronous (60%)
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://ai4dlg.eu
PURPOSE OF THE COURSE	The aim of this course is to equip postgraduate students with foundational and applied knowledge in Human-Machine Interaction (HMI), focusing on the pedagogical design, evaluation, and responsible use of virtual assistants and intelligent systems in educational contexts.
SUMMARY	This course covers core HMI concepts, cognition and UX principles, pedagogical conversational agents, multimodal interaction technologies, prototyping and evaluation methods, and ethical considerations in AI-supported learning environments.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes
Upon completion of the course, students will be able to: • Describe the fundamental concepts, principles, and evolution of Human-Machine Interaction (HMI) and explain how learners and educators interact with intelligent digital systems across different contexts. • Interpret and compare different HMI modalities, including conversational agents, virtual assistants, eye-tracking, physiological sensors (e.g., EEG, movement sensors), and immersive technologies such as XR, VR, and AR.

- Apply basic user-research and UX evaluation methods to observe, gather, and interpret interaction data using simple observational, conversational, multimodal, and usability-based techniques.
- Design and carry out small-scale pedagogical HMI activities, including drafting conversational flows, selecting or creating stimuli, conducting multimodal observations, and summarizing user learning experience findings.
- Evaluate the pedagogical, cognitive, and experiential value of HMI systems such as virtual assistants, interactive learning environments, and XR/VR/AR applications in education, communication, and support settings.
- Discuss ethical, privacy, and responsible-AI considerations when designing, deploying, or evaluating HMI systems for educational, clinical, or professional uses.
- Collaborate effectively in designing project materials (stimuli, interaction tasks, conversational scripts, multimodal data collection protocols) and in presenting user-interaction insights clearly and professionally.

Students will develop:

- Foundational understanding of Human-Machine Interaction (HMI) and its role in learning, communication, and human-AI collaboration.
- Skills in observing, interpreting, and discussing interaction data from conversational agents, virtual assistants, eye-tracking, sensors, XR/VR/AR systems, and other multimodal HMI technologies.
- Basic research competence in planning a small-scale pedagogical HMI project, designing conversational flows or stimuli, collecting multimodal data, and conducting introductory analysis.
- Pedagogical and cognitive-design awareness, understanding how learning theories, UX principles, and human factors inform the design of educational HMI systems.
- Ethical and privacy sensitivity concerning data collection, AI-supported interaction, minors, clinical contexts, and responsible AI deployment.
- Collaboration and communication skills through teamwork, peer evaluation, and structured presentation of project outcomes.
- Creative problem-solving abilities to identify interaction challenges and propose accessible, inclusive, and learner-centered improvements in HMI environments.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues

Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	.

The course aims to develop the following competences:

- Search for, analysis, and synthesis of data and information, with the use of the necessary technology
- Adapting to new teaching and learning situations
- Decision-making
- Working independently
- Teamwork
- Working in an educational environment
- Working in an interdisciplinary environment
- Apply pedagogical principles in using VA
- Production of free, creative and inductive thinking

Others:

- Responsible use of AI-based technologies
- Digital and information literacy in Human-Machine Interaction

3. COURSE SYLLABUS

Course Outline (Weekly Topics):			
Topics	Academic hours		
	Lectures	Seminars	Fieldwork
1. Foundations of Human-Machine Interaction and Educational Technology	2	2	4
2. Human Factors, Cognition, and Learning Theories in HMI	2	2	
3. User Experience (UX) and Instructional Design for Learning Technologies	2	2	
4. Virtual Assistants: Types, Functions, and Pedagogical Roles	2	2	
5. Pedagogical Designing and Interactive Agents for Learning	2	2	

6. Teaching and Learning Methods for Prototyping and Evaluating Virtual Assistants	2	2	
7. Human-Machine Interaction with Eye-Tracking and Sensors	2	2	
8. Interpreting Multimodal HMI Data	2		2
9. Best Practices in HMI with Emerging Technologies (XR, VR, AR)	2	2	
10. Ethics, Privacy, and Responsible AI in HMI	2		2
11. HMI Project Creation	2	2	
12. Project Implementation	2	2	4
13. Students' Microlearning Presentations	2	2	
Total: 60 hours	26	22	12

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING Face-to-face, distance learning, etc.	Distance learning
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	- Scheduled lessons, seminars and field work - Online consultations one hour per week - Study materials will be available remotely throughout the entire course
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication mode among students may include: - Structured team-based assignments and collaborative group projects Synchronous video-conference sessions, including breakout rooms for small-group interaction
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used in: - teaching - communication with students

TECHNOLOGICAL EQUIPMENT REQUIREMENTS	• Personal computer or laptop • Stable internet connection • Headset and webcam for synchronous participation																		
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin																		
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	The use of Artificial Intelligence is allowed only with the permission of the instructor, with explicit declaration and reference.																		
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	<table> <tr> <th>Activity</th><th>Semester workload</th></tr> <tr> <td>Lectures</td><td>26 hours</td></tr> <tr> <td>Seminars</td><td>22 hours</td></tr> <tr> <td>Fieldwork</td><td>12 hours</td></tr> <tr> <td>Individual work</td><td>50 hours</td></tr> <tr> <td>Group work</td><td>30 hours</td></tr> <tr> <td>Preparatory reading for the exam</td><td>20 hours</td></tr> <tr> <td>Course total</td><td>160</td></tr> <tr> <td></td><td></td></tr> </table>	Activity	Semester workload	Lectures	26 hours	Seminars	22 hours	Fieldwork	12 hours	Individual work	50 hours	Group work	30 hours	Preparatory reading for the exam	20 hours	Course total	160		
Activity	Semester workload																		
Lectures	26 hours																		
Seminars	22 hours																		
Fieldwork	12 hours																		
Individual work	50 hours																		
Group work	30 hours																		
Preparatory reading for the exam	20 hours																		
Course total	160																		
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions,	Language of assessment - English Formative and summative assessment Assessment methods: • Exams 30% • Individual work 40%																		

problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	• Group work 30% Attendance at lectures, seminars, synchronous learning activities, and any formally scheduled fieldwork, where applicable, is compulsory. Students are allowed to take the exam if they have submitted their independent assignments and received positive evaluations.
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5. RECOMMENDED BIBLIOGRAPHY

Compulsory literature:

- European Commission. (2022). Ethics Guidelines for Trustworthy AI.
- McTear, M. (2022). Conversational AI: Dialogue Systems, Conversational Agents, and Chatbots. Springer.
- Norman, D. (2013). *The Design of Everyday Things* (Revised and Expanded Edition). Basic Books.
- Radianti, J., et al. (2020). A systematic review of immersive virtual reality in education. *Computers & Education*, 147.
- Shneiderman, B., Plaisant, C., Cohen, M., Jacobs, S., & Elmqvist, N. (2017). *Designing the User Interface: Strategies for Effective Human-Machine Interaction*. Pearson.
- W3C. (2023). Web Content Accessibility Guidelines (WCAG) 2.2.

Additional literature:

- Holmqvist, K. et al. (2017). *Eye Tracking: A Comprehensive Guide to Methods and Measures* (2nd ed.). Oxford University Press.
- Luckin, R. (2018). *Machine Learning and Human Intelligence*. UCL Press.

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of the second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, to conduct scientific research, or to engage in professional artistic activity and implement innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship.
Personal abilities	Takes responsibility for improving own and team's performance.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject Human-Machine Interaction and Virtual Assistants (for Klaipėda university)

Components of the second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary knowledge of Human-Machine Interaction (HMI), including fundamental concepts, human-centered design, conversational agents, multimodal interaction technologies, UX principles and evaluation methods, and ethical and responsible AI frameworks, and can apply this knowledge in educational contexts.
Ability to conduct research	Students can observe, analyze, and interpret interaction data, apply basic user-research and UX evaluation methods, design small-scale pedagogical HMI studies or activities, and make informed decisions in familiar and unfamiliar educational technology contexts.
Special abilities	Students can design conversational flows, develop simple virtual assistant or interaction prototypes, select and use appropriate multimodal tools (e.g., eye-tracking, physiological sensors, XR/VR/AR), and evaluate the pedagogical, cognitive, and experiential effectiveness of HMI systems.
Social abilities	Students work effectively in interdisciplinary teams, co-design pedagogical learning experiences, communicate findings and design decisions clearly to specialist and non-specialist audiences, and demonstrate ethical responsibility, inclusion, and respect for diversity in digital environments.
Personal abilities	Students manage their own learning process, reflect critically on design, evaluation, and responsible-AI decisions, act independently and strategically in AI-supported contexts, and propose creative, learner-centered improvements in HMI environments.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of Human-Machine Interaction (HMI), including fundamental concepts, human-centered design, conversational agents, multimodal interaction technologies, UX principles and evaluation methods, and ethical and responsible AI frameworks, and can apply this knowledge in educational contexts.	Lectures, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students can observe, analyze, and interpret interaction data, apply basic user-research and UX evaluation methods, design small-scale pedagogical HMI studies or activities, and make informed decisions in familiar and unfamiliar educational technology contexts.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students can design conversational flows, develop simple virtual assistant or interaction prototypes, select and use appropriate multimodal tools (e.g., eye-tracking, physiological sensors, XR/VR/AR), and evaluate the pedagogical, cognitive, and experiential effectiveness of HMI systems.	Seminars, field work, individual work, group work, consultations	Individual work, group work

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
4	Students work effectively in interdisciplinary teams, co-design pedagogical learning experiences, communicate findings and design decisions clearly to specialist and non-specialist audiences, and demonstrate ethical responsibility, inclusion, and respect for diversity in digital environments.	Individual work, group work, consultations	Individual work, group work
5	Students manage their own learning process, reflect critically on design, evaluation, and responsible-AI decisions, act independently and strategically in AI-supported contexts, and propose creative, learner-centered improvements in HMI environments.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total in hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual Reflection Paper 1 (HMI Foundations & UX)	1-3	10	10%	*			0													
Individual Assignment 2 (Analysis of an HMI System or Virtual Assistant)	4-6	10	10%	*					0											
Individual Assignment 3 (Multimodal HMI Analysis - sensors/XR case)	7-9	10	10%	*									0							
Individual Assignment 4 (Ethical & Responsible AI Evaluation Report)	10	10	10%	*										0						
Individual Final Reflection & Theoretical Integration	11-12	10	10%	*											0					
Group Project - HMI Design Proposal (Part A: Concept & Design)	5-8	15	10%	*								0								
Group Project - HMI Prototype & Evaluation (Part B:	9-12	15	10%	*												0				

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Implementation & Presentation)																				
Preparatory Reading for the Exam	1-13	20	30%	*												0				
Total:	-	100	100																	

Proforma - 3.1 Master's Thesis

COURSE OUTLINE

1. GENERAL

University of Ioannina (UOI)	SCHOOL	School of Education	
	ACADEMIC UNIT	Department of Early Childhood Education	
University of Klaipėda (UOK)	SCHOOL	Faculty of Social Science and Humanities	
	ACADEMIC UNIT	Department of Pedagogy	
LEVEL OF STUDIES		Postgraduate	
COURSE CODE		SEMESTER	
COURSE TITLE		Master's Final Thesis	
CO-ORDINATING LECTURERS			
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits		WEEKLY HOURS	CREDITS
Lectures, seminars, field work		Meetings with supervisor	30 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).			
COURSE TYPE general background, special background, specialization, general education, skills development		GENERAL KNOWLEDGE	
PREREQUISITE COURSES		NONE	
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT		English	
MODE OF TEACHING in-person (%) synchronous distance learning (%) asynchronous distance learning (%)		Distance learning (100%) synchronous (40%) - asynchronous (60%)	

(In the case of synchronous distance learning, the total weekly duration of teaching is recorded)	
AVAILABILITY TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	
PURPOSE OF THE COURSE	The subject aims to develop an independent theoretical-empirical research work, which would reveal the essential competences corresponding to the Master's qualification degree; to summarize theoretical knowledge acquired during the Master's studies and the skills of research work
SUMMARY	The writing of Master's Final Thesis is intended to demonstrate the competences in the field of topical issues of childhood education acquired by graduate student during the studies. The subject of Master's Final Thesis covers the specification of the outcomes of empirical research, drawing of conclusions, improvement of language and style of the text, description of the chosen scientific sources, the processing of the thesis, and student's preparedness for scientific discussion in the public defence of the final thesis.

2. LEARNING OUTCOMES

Learning Outcomes The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A • Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B • Brief Guide for drafting Learning Outcomes Upon completion of the course, students will be: • Able to analyze, diagnose, and critically evaluate the needs and problems of children and adolescents, and to collect the theoretical and empirical data required for professional purposes. • Able to independently design and conduct social pedagogical research using various research strategies, interpret data, and present conclusions and
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recommendations, anticipating the impact of the results on social education and support practice.

- Able to assume the role of a social educator-researcher, clearly and convincingly present a research report, and initiate change in the field of social education.
- Able to develop and apply diagnostic tools for assessing the quality of social education and support, evaluate the accessibility of support services and environmental safety, and make evidence-based decisions while anticipating their impact on the effectiveness of social pedagogical support for children and adolescents.
- Able to present the results of social pedagogical research to diverse audiences (parents, teachers, specialists, etc.), and to engage in evidence-based discussion on the needs of children and adolescents and strategies for addressing their problems, grounded in scientific data and practical insights.
- Able to reflect on their research activity, plan continuous learning and professional career development, and adapt to changing professional contexts.
- Able to apply interdisciplinary knowledge to create an inclusive learning environment and to initiate interinstitutional cooperation to ensure the well-being of children and adolescents.
- Able to critically analyze and integratively apply contemporary educational theories when assessing the needs of children and adolescents and complex cases, and to provide data-driven solutions for improving social education and support practice.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adaptability to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	Other
Production of new research ideas	

The Master's Final Thesis aims to develop the following general competences:

- Search, analysis and synthesis of data and information, with the use of the necessary technology: Students collect, analyse and synthesise theoretical and empirical research data using appropriate scientific methods and digital tools.
- Adaptability to new situations: Students adapt to complex and evolving research contexts, addressing emerging educational and social issues.
- Decision-making: Students make evidence-based decisions throughout the research process, including research design, data interpretation, and formulation of conclusions and recommendations.
- Working independently: Students independently plan, implement, and complete a full-cycle research project, demonstrating responsibility for their academic work.
- Team work: Students collaborate with supervisors and, where relevant, with stakeholders (e.g., educators, practitioners) during the research process.
- Working in an interdisciplinary environment: Students integrate knowledge from education, social sciences, and related fields to address complex research problems.
- Production of new research ideas: Students formulate original research questions and contribute to the development of new knowledge in the field of education.
- Project planning and management: Students design and manage the research process, including timeline planning, data collection, analysis, and reporting.
- Respect for difference and multiculturalism: Students consider diverse social, cultural, and educational contexts when conducting and interpreting research.
- Showing social, professional and ethical responsibility and sensitivity to gender issues: Students conduct research in accordance with ethical standards, ensuring integrity, confidentiality, and sensitivity to social and gender-related issues.
- Criticism and self-criticism: Students critically evaluate scientific literature, research findings, and their own work.
- Production of free, creative and inductive thinking: Students apply creative and critical thinking in developing research design, interpreting data, and generating conclusions.

3. COURSE SYLLABUS

Course Outline (Weekly Topics):

Not applicable. The Master's Final Thesis is organised as an individual research project without scheduled weekly teaching activities.

4. TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING

Face-to-face, distance learning, etc.

- Distance learning

MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	• Communication with students is primarily based on individual supervision and continuous academic support throughout the Master's Final Thesis process. • Individual consultations (one-to-one tutorials): Regular meetings with the supervisor (typically once per week or as agreed), focusing on research design, data collection, analysis, and writing progress. • Ongoing feedback: Continuous written and oral feedback is provided on submitted drafts, research instruments, and analytical results. • Online communication: Email and virtual learning environments are used for regular communication, submission of work, and feedback. • Additional consultations: Ad hoc meetings are organised when needed to address specific research challenges or methodological issues. • Preparation for defence: Targeted consultations are provided before the public defence to support presentation preparation and academic discussion.
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.	Communication among students is supported through peer interaction and academic exchange during the Master's Final Thesis process. • Peer consultations and informal discussions: Students are encouraged to discuss research ideas, methodological approaches, and challenges with their peers. • Seminars and group meetings (where applicable): Opportunities for presenting

	research progress and receiving feedback from fellow students. • Online communication tools: Use of virtual learning environments, email, and video conferencing platforms to facilitate exchange of ideas and experiences. • Peer feedback: Students may provide constructive feedback on each other's work during interim presentations or discussions. • Q&A sessions and academic discussions: Participation in group consultations or thematic discussions related to research methodology and thesis preparation.
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, in laboratory training, in the communication with students	Information and Communication Technologies (ICT) are used to support the development, implementation, and supervision of the Master's Final Thesis: • Research and data analysis: Use of digital tools and software for literature search, data collection, processing, and analysis (e.g., statistical packages, qualitative analysis tools). • Academic writing and documentation: Use of word processing, reference management software, and plagiarism detection systems. • Communication with students: Email, virtual learning environments, and video conferencing platforms are used for consultations, feedback, and supervision. • Information retrieval: Access to digital libraries, scientific databases, and online academic resources. • Presentation and defence preparation: Use of presentation software and

	digital tools for preparing and delivering the public defence.
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	• Personal computer or laptop capable of running standard office, data analysis, and research software • Stable internet connection for accessing academic resources and participating in online consultations • Access to word processing and presentation software • Access to research and data analysis tools (e.g., statistical or qualitative analysis software, as required by the study) • Access to digital libraries and scientific databases • Headset and webcam for online meetings and thesis defence preparation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	All submitted work must comply with institutional academic integrity regulations for no Plagiarism Plagiarism Detection software is Turnitin
ARTIFICIAL INTELLIGENCE POLICY (1) The use of Artificial Intelligence is prohibited in all circumstances (2) The use of Artificial Intelligence is allowed only with the permission of the instructor (3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature (4) Students are free to use Artificial Intelligence	The use of Artificial Intelligence is allowed only with the permission of the supervisor and must be explicitly declared and appropriately referenced. Students may use AI tools to support specific stages of the research process (e.g., idea generation, language improvement, data organisation), provided that: • the use of AI does not replace independent academic work and critical thinking; • all AI-assisted contributions are transparently acknowledged; • the use complies with academic integrity and ethical standards. The student remains fully responsible for the originality, validity, and

	scientific quality of the submitted thesis.
ORGANISATION OF TEACHING The mode and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc. The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.	The Master's Final Thesis is carried out primarily through: • Individual tutorials (one-to-one supervision) • Independent study and research activities, including literature analysis, research design, data collection and analysis, and thesis writing • Consultations and feedback sessions throughout the research process In accordance with ECTS principles, the workload is predominantly based on independent work, supported by regular supervision and consultations.
STUDENT ASSESSMENT Description of the assessment method Language of assessment, methods of assessment, formative or summative assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	Language of assessment - English Formative and summative assessment Assessment methods: Written work (Master's thesis) Oral examination (public defence of the thesis) Presentation of research results Discussion and justification of research decisions Assessment criteria: • The evaluation is based on clearly defined criteria, including: • relevance and originality of the research problem • quality of theoretical analysis and literature review • appropriateness of research design and methodology • quality of data analysis and interpretation • validity and significance of conclusions and recommendations

	• academic writing quality and structure • ability to present and defend the research All criteria are provided to students in advance and are accessible through institutional regulations and methodological guidelines for the preparation of the Master's thesis. The final grade is calculated as the average of the evaluations provided by the members of the assessment (qualification) committee.
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5. RECOMMENDED BIBLIOGRAPHY

Compulsory literature:

- Bitinas, B., Rupšienė, L., & Žydžiūnaitė, V. (2008). Kokybinių tyrimų metodologija. S. Jokužio leidykla-spaustuvė.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. SAGE.
- Gaižauskaitė, I., & Valavičienė, N. (2016). Socialinių tyrimų metodai: Kokybinis interviu. Mykolo Romerio universitetas.
- Hamilton, L. (2013). Using case study in education research. SAGE.
- Kardelis, K. (2016). Mokslinių tyrimų metodologija ir metodai. Mokslo ir enciklopedijų leidybos centras.
- Klaipėdos universitetas. (2025). Klaipėdos universiteto studentų savarankiškų rašto darbų bendrųjų reikalavimų aprašas.
- Klaipėdos universitetas, Socialinių ir humanitarinių mokslų fakultetas. (2025). Pedagogikos katedros magistro baigiamojo darbo rengimo specialieji reikalavimai.
- Magnusson, E. (2015). Doing interview-based qualitative research: A learner's guide. Routledge.
- Rupšienė, L. (Red.). (2025). Socialinių tyrimų metodologinė panorama (I tomas). Klaipėdos universiteto leidykla.
- Rupšienė, L., & Rutkienė, A. (2016). Edukacinis eksperimentas. Klaipėdos universiteto leidykla.
- SAGE. (2025). The SAGE handbook of social research methods. SAGE Publications.
- Vaičekauskaitė, R. (2023). Mokslinių tyrimų metodologijos diskursas. Klaipėdos universiteto leidykla.

Additional literature:

- Hars, R. (2025). Research skills reader: 2024-2025 edition. University of Groningen Press.
- Lorraine, R. (2014). Educational research: Competencies for analysis and applications. Pearson.

- Norkus, Z., & Morkevičius, V. (2011). Kokybinė lyginamoji analizė: Vadovėlis aukštųjų mokyklų studentams. KTU leidykla.
- Sharma, D. (2024). The illustrated guide to social science research. Routledge.
- Suter, W. N. (2012). Introduction to educational research: A critical thinking approach. SAGE.
- Wright, P. (2025). Research methodology and social science. EdTech Press.

APPENDIX 1. DESCRIPTION OF SECOND CYCLE STUDY OUTCOMES

Components of second cycle study outcomes description	Explanations
Knowledge and its application	The most recent knowledge in the field of study or activity, based on the results of fundamental or applied scientific research (research components of art projects), which can be applied to solve problems in new or unfamiliar environments, conducting scientific research or engaging in professional artistic activity, implementing innovations.
Ability to conduct research	Ability to analyze, synthesize and evaluate research data necessary for studies, scientific (artistic), professional activities and innovation implementation, ability to integrate knowledge and manage complex situations, make decisions when information is incomplete and undefined, evaluate alternative solutions and potential impact on the environment.
Special abilities	Ability to apply existing knowledge and, based on it, develop new tools (technical, methodological, informational, organizational-managerial) necessary for conducting scientific research, studies, cultural and artistic activities or implementing innovations.
Social abilities	Ability to clearly and argumentatively convey summarized information to specialists and other persons, critically evaluating it. Ability to work individually and in a team. Takes responsibility for the quality of own and team's work and its evaluation, guided by professional ethics and citizenship. Takes responsibility for improving own and team's performance.
Personal abilities	Ability to independently plan the learning process, independently choose the direction of improvement and continue developing (learning) independently. Ability to utilize scientific research (artistic activity) knowledge, has experience in research work and skills in systematic and strategic thinking for independent professional activity and scientific research work (artistic activity). Ability to make innovative decisions, evaluating possible social and ethical consequences of activities. Acts with awareness of moral responsibility for the impact of own

Components of second cycle study outcomes description	Explanations
	activities and their results on social, economic, cultural development, well-being and the environment.

APPENDIX 2. DETAILS OF LEARNING OUTCOMES

Table 1. Learning outcomes of the study subject MSc Thesis (for Klaipėda university)

Components of second cycle study outcomes description	Explanations
Knowledge and its application	Students acquire interdisciplinary knowledge of AI in education, including foundational AI concepts, instructional and learning experience design frameworks, learning analytics, data literacy, ethical and policy dimensions of educational AI, and evidence-based decision-making in educational contexts.
Ability to conduct research	Students can evaluate AI tools and systems used in learning design, analytics, and decision-making, critically assess learning analytics data, interpret predictive models, and draw evidence-based conclusions to support educational improvement.
Special abilities	Students can design AI-enhanced learning activities using instructional design frameworks (ADDIE, LXD), apply learning analytics tools and dashboards, interpret educational datasets, and present data-driven findings in structured formats.
Social abilities	Students work effectively in interdisciplinary teams on AI-based educational projects, demonstrate ethical responsibility in AI adoption, respect learner data rights, and communicate findings on AI in education clearly to diverse stakeholders.
Personal abilities	Students manage their own learning process in AI-enhanced education, reflect critically on the ethical and pedagogical implications of AI use, acknowledge the limitations of AI systems, and make informed decisions considering impacts on learners and educational communities.

Table 2. Learning outcomes - Teaching / Learning Methods - Assessment Methods

N	Learning Outcomes	Teaching / Learning Methods	Assessment Methods
1	Students acquire interdisciplinary knowledge of AI in education, including foundational AI concepts, instructional and learning experience design frameworks, learning analytics, data literacy, ethical and policy dimensions of educational AI, and evidence-based decision-making in educational contexts.	Lessons, seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
2	Students can evaluate AI tools and systems used in learning design, analytics, and decision-making, critically assess learning analytics data, interpret predictive models, and draw evidence-based conclusions to support educational improvement.	Seminars, field work, individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam
3	Students can design AI-enhanced learning activities using instructional design frameworks (ADDIE, LXD), apply learning analytics tools and dashboards, interpret educational datasets, and present data-driven findings in structured formats.	Seminars, field work, individual work, group work, consultations	Individual work, group work
4	Students work effectively in interdisciplinary teams on AI-based educational projects, demonstrate ethical responsibility in AI adoption, respect learner data rights, and communicate findings on AI in education clearly to diverse stakeholders.	Individual work, group work, consultations	Individual work, group work
5	Students manage their own learning process in AI-enhanced education, reflect critically on the ethical and pedagogical implications of AI use, acknowledge the limitations of AI systems, and make informed decisions considering impacts on learners and educational communities.	Individual work, group work, preparatory reading for the exam, consultations	Individual work, group work, exam

Table 3. Distribution of Students' Work

Student independent work assignment	Number of the topic specified in the syllabus	Total hours	Influence on grade, %	Which week the assignment is given (*) and when students must submit it to the lecturer(o)																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Individual work	1-2	10	10	*	0															
Individual work	3-4	10	10	*		0														
Individual work	5-6	10	10	*			0													
Individual work	7, 9	10	10	*							0									
Group work	8	15	15	*						0										
Group work	10	15	15	*								0								
Individual work	11-12	10	10	*											0					
Preparatory reading for the exam	1-13	20	20	*												0				
Total:	-	100	100																	

Annex III. Master's Thesis Guidelines

This Annex presents detailed academic and procedural guidance on the preparation of the Master's Thesis, including:

- topic selection;
- supervision arrangements;
- formatting requirements;
- submission deadlines;
- public presentation and defence procedures;
- and repository deposit requirements.

AIII.1 Purpose of this Annex

This Annex provides practical academic guidance on the preparation of the **Master's Thesis (M.Th.)** in the Joint International Master's Programme **AI for Digital Learning and Gamification**. It should be read together with the official **Joint International Master's Regulations**, which remain the binding source for all formal matters concerning thesis eligibility, supervision, examination, public defence, re-submission, and repository deposit.

The present Annex is intended to support students in planning, writing, submitting, and defending the thesis in a clear and academically appropriate manner.

AIII.2 Academic Nature of the Master's Thesis

The Master's Thesis is the final and most substantial academic component of the programme. It carries **30 ECTS**, is prepared during the **third semester**, and must be:

- individual;
- original;
- of a research character;
- and clearly related to the academic scope of the programme.

The thesis should demonstrate that the student is able to:

- define and investigate a focused academic problem;
- use appropriate research methods;
- engage critically with relevant literature;
- interpret and discuss findings in a coherent way;
- and connect theory, methodology, and pedagogical implications within the programme's field.

Indicative thesis areas include:

- digital education and digital pedagogy;
- artificial intelligence in education;
- gamification and learner engagement;
- learning design and learning analytics;
- internet safety and AI ethics;
- human-machine interaction and virtual assistants;
- and related topics in Educational Sciences.

AIII.3 Eligibility to Begin the Thesis

Preparation of the Master's Thesis begins **after attendance of all programme courses and successful completion of all examinations**. This means that the thesis is not an independent parallel activity from the outset, but the final academic stage of the programme. While the formal submission and defence of the Master's Thesis require the successful completion of all coursework, the process of topic selection and supervisor appointment may begin earlier in accordance with programme-specific procedures.

Students should therefore approach the thesis as the capstone of the degree, building on the theoretical, pedagogical, methodological, and ethical foundations developed during the taught semesters.

AIII.4 Topic Selection

AIII.4.1 General Principles

The thesis topic must fall within the **scope of the programme** and should be both academically relevant and realistically manageable within the available time.

A good thesis topic should be:

- clearly defined;
- relevant to the programme's thematic areas;
- researchable with available methods and sources;
- ethically sound;
- and appropriately narrow for a Master's-level study.

Students are encouraged to select a topic that:

- reflects their academic interests;
- connects to one or more courses of the programme;
- and has a clear educational, pedagogical, or research value.

AIII.4.2 From Topic to Research Question

Students should move from a broad subject area to a more focused research problem. For example:

- broad area: AI in education
- narrower topic: use of AI-supported feedback tools in higher education
- research focus: student perceptions, pedagogical value, ethical concerns, or learning outcomes

A thesis topic should normally be expressed through:

- a clear title;
- a central research question or aim;
- and, where appropriate, sub-questions or objectives.

AIII.4.3 Thesis Seminar and Initial Information

According to the Joint International Master's Regulations, students are informed about the thesis process at a **seminar event held during the last week of May each year**.

Students should use that seminar as the formal starting point for:

- understanding the thesis process;
- identifying possible topic areas;
- exploring supervision possibilities;
- and preparing the next formal step.

AIII.5 Supervision Arrangements

AIII.5.1 Request for Supervision

After the thesis seminar, the student submits a request to the **Programme Secretariat** by **20 September** each year, indicating the **proposed supervisor**. The **Programme Study Committee** formally appoints the supervisor, who also recommends the thesis title.

AIII.5.2 Who May Supervise

Master thesis supervisors are professors, from the **Department of Early Childhood Education**, UoI, or Department of Pedagogy, **Klaipėda University**, or professors from cooperating departments of both universities, or from other cooperating higher education institution in Greece or abroad considering that they participate in the programme.

This broad supervisory framework supports the interdisciplinary and international character of the programme.

The Regulations also allow, by decision of the competent programme body, supervision by suitably qualified staff or permanent members of cooperating research bodies in Greece or abroad, even if they do not teach in the programme, provided they hold a doctoral degree and have a relevant field of knowledge.

AIII.5.3 Role of the Supervisor

The supervisor is expected to guide the student academically throughout the thesis process. This normally includes support in:

- refining the topic and title;
- clarifying research questions and objectives;
- choosing an appropriate methodology;
- structuring the work;
- identifying relevant bibliography;
- reviewing drafts and giving academic feedback;
- and judging when the thesis is ready for submission.

The supervisor's role is to guide and evaluate academic quality, not to co-author the thesis. Responsibility for the final content remains with the student.

AIII.5.4 Good Supervisory Practice

Students are strongly advised to:

- maintain regular communication with the supervisor;
- agree on a realistic schedule of work;
- submit written material progressively rather than all at once;
- and keep a record of agreed revisions and deadlines.

AIII.6 Recommended Stages of Thesis Preparation

A practical thesis workflow may include the following stages:

1. Selection of topic area
2. Initial discussion with proposed supervisor
3. Refinement of title and research question
4. Preliminary literature review
5. Choice of methodology and research design
6. Ethics and permissions, where required
7. Data collection / analytical work
8. Writing of chapters
9. Revision after supervisor feedback
10. Final submission
11. Public presentation and defence
12. Final corrected version and repository deposit

This staged process is not a substitute for the Regulations, but it is a useful academic planning model consistent with the programme's research orientation.

AIII.7 Suggested Structure of the Thesis

Unless the programme issues a separate official template, the following structure is recommended as an academically appropriate format for the Master's Thesis.

Preliminary pages

- Title page
- Declaration of originality
- Acknowledgements (optional)
- Abstract in English
- Extended abstract in Greek
- Extended abstract in Lithuanian
- Keywords
- Table of contents
- List of tables (if applicable)
- List of figures (if applicable)

A thesis-writing guide from the Department of Early Childhood Education suggests including an abstract, keywords, table of contents, and separate lists of figures and tables where relevant. This can be used as a helpful academic model for structuring research work, provided it does not conflict with programme-specific instructions.

Main body

1. Introduction
2. Theoretical / Literature Review
3. Research Aim, Questions and/or Hypotheses
4. Methodology
5. Results / Findings
6. Discussion

7. Conclusions
8. Pedagogical Implications / Recommendations where relevant
9. Limitations and Suggestions for Further Research

Final pages

- References / Bibliography
- Appendices (if applicable)

This structure may be adapted depending on whether the thesis is empirical, theoretical, design-based, review-based, or mixed-methods in character.

AIll.8 Formatting Requirements

The Joint International Master's Regulations state that the thesis must be drafted in accordance with the **writing guidelines**.

Where no separate official programme template has yet been issued, the following formatting standards are recommended for consistency and academic readability:

AIll.8.1 General formatting

- Use a clear academic font such as **Times New Roman**, **Arial**, or **Calibri**
- Font size: **12 pt** for main text
- Line spacing: **1.5**
- Justified text alignment
- Standard page margins (for example **2.5 cm** on all sides)
- Continuous page numbering

AIll.8.2 Title page

The title page should normally include:

- name of the programme;
- title of the thesis;
- student's full name;
- supervisor's name;
- partner universities;
- academic year;
- and place/date of submission.

AIll.8.3 Abstracts and keywords

The Joint International Master's Regulations require that the thesis be written in **English** with an extended abstract of **200 words** in **Greek** and in **Lithuanian**.

It is also strongly recommended to include:

- an English abstract;
- and 5-6 keywords.

The PTN guide suggests that an abstract should present the topic, aims, methodology, conclusions, and contribution or limitations.

AIll.8.4 Headings and chapters

Use a consistent heading hierarchy, for example:

- Chapter 1
- 1.1
- 1.1.1

AI.8.5 Tables and figures

All tables and figures should:

- be numbered consecutively;
- have clear titles/captions;
- be referred to in the text;
- and indicate source information where applicable.

AI.8.6 Citations and referencing

Students must use a **consistent academic referencing system** throughout the thesis. If no programme-specific style is prescribed, one recognised academic style such as **APA** may be used consistently.

All direct quotations, paraphrases, theoretical ideas, data, and borrowed material must be properly cited.

AI.8.7 Appendices

Appendices should include only material that supports the thesis but is too detailed for the main text, such as:

- questionnaires;
- interview protocols;
- coding schemes;
- ethics forms;
- supplementary tables;
- or sample materials.

AI.9 Academic Integrity and Use of Sources

The Joint International Master's Regulations explicitly require postgraduate students to declare the use of the work, ideas, and **AI tools** of others. They also define plagiarism as a serious academic offence.

Students must therefore ensure that:

- all borrowed ideas and sources are properly acknowledged;
- all direct quotations are clearly marked and cited;
- paraphrased content is genuinely reformulated and cited;
- any use of AI tools is transparent and academically responsible;
- and the thesis remains the student's own original academic work.

Plagiarism includes:

- copying another person's work;
- using published or unpublished work without attribution;
- and reusing one's own previous work without proper acknowledgement where required.

AIll.10 Research Ethics

Where the thesis includes empirical research involving participants, personal data, educational settings, or potentially sensitive material, the student must ensure that the research is conducted ethically and lawfully.

Students should pay particular attention to:

- informed consent;
- confidentiality and anonymity;
- safe data handling;
- protection of minors or vulnerable participants where relevant;
- responsible use of digital data;
- and respect for institutional and legal requirements.

Because the programme concerns educational and digital contexts, ethical issues may also arise in:

- use of platform data;
- AI-generated material;
- automated systems;
- digital traces;
- and online participant interaction.

Students should consult their supervisor early if their project raises ethical questions.

AIll.11 Submission Deadlines and Procedure

The Regulations define the following formal milestones:

- **last week of May:** thesis information seminar;
- **20 September:** submission of request to the Programme Secretariat indicating the proposed supervisor.

After completion of the thesis, the student submits the work to the programme, and it is forwarded to the **Public Defence Committee**. The exact final submission date for each academic cycle should be followed as announced through the programme's official calendar and Secretariat communications.

Students are strongly advised:

- not to wait until the final deadline to complete the thesis;
- to allow enough time for supervisor feedback and revision;
- and to confirm format and submission requirements with the Secretariat before final submission.

AIll.12 Thesis Defence Committee

The Joint International Master's Regulations provide that the **five-member Thesis Defence Committee** is determined by the **Programme Study Committee** upon recommendation of the supervisor. The Committee must include **at least one member from each Partner University**. One member is the supervisor. All members must have

the same or a related scientific specialisation as the programme's field or relevance to the thesis topic.

This ensures both academic relevance and the joint institutional character of the evaluation.

AIII.13 Public Presentation and Defence

AIII.13.1 Setting the defence date

After submission of the thesis, and if there is a positive preliminary assessment by the Defence Committee, the date of the public presentation/defence is set and announced on the websites of the departments and the Joint Master's programme.

AIII.13.2 What is assessed

According to the Regulations, the Defence Committee evaluates:

- the structure and content of the thesis;
- the organisation and development of the topic;
- the presentation and evaluation of methodology and results;
- the bibliography and explanatory elements;
- the quality of the public presentation;
- and the broader scientific competence of the student.

AIII.13.3 Suggested structure of the oral presentation

A student presentation may normally include:

1. title and rationale of the study;
2. research aim and questions;
3. brief theoretical framework;
4. methodology;
5. main findings;
6. discussion and conclusions;
7. pedagogical implications;
8. limitations and future directions.

Students should prepare to answer academic questions clearly and concisely and to defend methodological choices and interpretations.

AIII.14 Final Report, Grade, and Outcome

After the public presentation/evaluation, the Defence Committee drafts and signs the Public Presentation Report, including comments and the final grade, and submits it for approval to the Programme Study Committee.

The thesis is graded on the programme's 0-10 grading scale, with 5.0 and above considered a passing grade.

AIII.15 Revision and Re-Submission

If the thesis receives a negative assessment, the student has the right to revise and re-submit it for a second evaluation. The timeframe for re-submission is determined by the Joint Programme Study Committee, taking into account the regulations of both partner universities and the academic calendar.

The student is entitled to only one re-submission. A second negative assessment leads to removal from the programme.

Students should therefore take supervisor feedback and committee observations seriously and address revision requirements in a systematic way.

AIII.16 Repository Deposit Requirements

Approved Master's Theses must be deposited in the institutional repositories of **both partner universities**. The Regulations explicitly state that approved theses are compulsorily deposited in the **"OLYMPIAS" Digital Repository of the University of Ioannina** and in the **institutional repository of Klaipėda University**.

Students should therefore expect that, after successful defence and any final corrections required by the Defence Committee, they will need to submit the final approved version in the form required for repository deposit.

The repository deposit process supports:

- academic transparency;
- institutional archiving;
- and visibility of postgraduate research.

AIII.17 Practical Advice for Students

Students are strongly advised to:

- start thinking about a thesis topic early in the programme;
- keep notes on possible research questions while attending courses;
- build a working bibliography progressively;
- discuss feasibility with the supervisor at an early stage;
- keep the topic focused and realistic;
- follow a consistent citation style from the beginning;
- back up files regularly;
- allow enough time for revision before submission;
- prepare carefully for the defence;
- and check all formal requirements before final deposit.

AIII.18 Final Note

This Annex is intended to make the thesis process academically clear and practically manageable for students. However, for all formal matters concerning eligibility,

supervision, committee composition, defence, re-submission, grading, and repository deposit, the **Joint International Master's Regulations** remain the binding authority.

Annex VI. Online Services, Digital Platforms, and Online Assessment Support

AVI.1 Purpose of this Annex

This Annex provides practical information on the online services, digital platforms, and online assessment support mechanisms available to students of the Joint International Master's "AI for Digital Learning and Gamification." It complements the main body of the Study Guide and should be read together with the sections on teaching and learning, assessment, the digital learning environment, quality assurance, and practical information.

AVI.2 Main Digital Platforms

The main digital platforms supporting the programme include Microsoft Teams, E-COURSE, and the complementary Virtual Learning Environment (VLE) used through the partner institutions. These platforms support synchronous teaching, access to educational materials, academic communication, assignment management, and online mentoring.

AVI.3 Online Academic Services Available to Students

Students have access to a range of online academic services that support participation in the programme. These may include:

- access to course materials, notes, and presentations;
- application and document sharing;
- exercises and activities with feedback;
- assignment upload and submission tools;
- sample solutions where appropriate;
- discussion spaces and chat functions for communication and collaboration;
- electronic whiteboard tools;
- online spaces for supervision and mentoring;
- and, where appropriate and legally permitted, multimedia and interactive educational material.

All educational material made available through the programme is provided for students' academic use within the framework of their studies.

AVI.4 Language and Accessibility of the Digital Environment

Because the Joint International Master's is delivered in English, the online learning environment is expected to be fully supported in English. The integrated e-learning environment should also operate within an accessibility-oriented framework for students with disabilities and/or special educational needs, in accordance with the applicable academic and institutional provisions of the programme and the partner universities.

AVI.5 Technical Requirements for Participation

Students are expected to have regular access to the digital systems used in the programme and to possess the basic digital readiness required for participation in an

international distance-delivered postgraduate programme. In practical terms, this includes:

- reliable internet access;
- an appropriate computer or laptop;
- updated software or browsers where required;
- and, for certain online assessment activities, a webcam and microphone.

Students are expected to follow the technical instructions provided for teaching, communication, assignment submission, and online assessment.

AVI.6 Online Assessment Support

Online assessment in the programme may include timed examinations, open-book examinations, oral examinations through video conferencing, online quizzes, written assignments, and other digitally mediated forms of assessment appropriate to the intended learning outcomes of each course.

To support student participation in online examinations, the programme may provide:

- technical guidance before major assessments;
- mock examination opportunities where appropriate;
- instructions concerning the digital examination environment;
- and alternative arrangements in justified cases, including for students with disabilities, special educational needs, or documented connectivity difficulties.

Online examination support may also include guidance on secure access, user authentication, identity verification, examination logs, permitted and unauthorised materials, contingency procedures in case of technical disruption, and alternative submission methods where the examination platform becomes unavailable.

AVI.7 Academic Integrity in Online Assessment

Academic integrity in digitally mediated assessment is protected through the academic rules of the programme and through appropriate online assessment procedures. Depending on the form of assessment, such measures may include plagiarism detection software, authorship verification, structured time limits, question randomisation, and other procedures judged suitable for ensuring fairness, transparency, reliability, and academic credibility.

Students are expected to comply fully with the principles of academic honesty, responsible use of digital systems, and proper acknowledgement of sources in all forms of assessed work.

AVI.8 E-Learning Support Contact

The programme may designate a person responsible for supporting lecturers and students in the effective use of the integrated e-learning environment. Where such a role is formally designated, the relevant contact details should be communicated to students through the official communication channels of the programme.

AVI.9 Data Protection and Secure Digital Use

The online learning and assessment environment of the programme operates within the broader framework of data protection, information confidentiality, and cybersecurity

policies applied by the partner institutions and the programme. The use of digital systems must comply with the applicable rules on personal data protection, secure access, authorised use, and responsible academic use of online platforms and resources.

In the context of remote online examinations and remote assessment, students are informed in advance about the categories of data that may be collected and processed, the purposes of processing, possible recordings where applicable, data retention periods, access rights, and the safeguards applied to protect personal data.

Teaching staff, invigilators, platform administrators, and technical or administrative support staff involved in online examinations are bound by confidentiality obligations. Access to examination-related data, recordings, logs, identification records, submissions, similarity reports, and grades is limited to authorised users and only to the extent necessary for academic, administrative, technical, quality assurance, or integrity-review purposes.

Students are expected to use the digital environment responsibly, protect their personal access credentials, avoid sharing examination links or course materials with unauthorised persons, and participate in online learning and assessment in a manner consistent with academic ethics, personal data protection, confidentiality, and institutional cybersecurity rules.

AVI.10 Final Note

The online services and digital systems of the Joint International Master's are not supplementary but integral to the academic identity of the programme. They support learning, communication, supervision, assessment, accessibility, and international academic participation, and they form a core part of the student experience in the Joint International Master's "AI for Digital Learning and Gamification."

Annex V. Useful Websites and Online Resources for the Joint International Master

Students are advised to regularly consult the following official websites and online platforms for updated information on the Programme, academic procedures, student services, and digital learning resources.

Resource	Official Website / Online Access
Joint International Master's Programme	ai4dlg.eu
University of Ioannina	https://uoi.gr/en/
Department of Early Childhood Education, Uoi	https://ecedu.uoi.gr/?lang=en
Official Uoi department listing page	https://uoi.gr/en/departments/paidagogiko-tmima-nipiagogon/
Lab of New Technologies & Distance Learning, Uoi	https://lab-ntodl.ecedu.uoi.gr/en
Erasmus+ for students, Uoi	https://piro.uoi.gr/erasmus/foitites/
E-COURSE, Uoi	https://ecourse.uoi.gr/
Centre for the Study of the Hellenic Language and Culture	https://uoi.gr/en/featured/helas/
Foreign Language Centre	https://uoi.gr/en/featured/foreign-language-centre/
Library, Uoi	https://lib.uoi.gr/en/
Employment & Career Centre (DASTA), Uoi	https://uoi.gr/en/featured/employment-career-centre-dasta/
Research Strategy, Uoi	https://uoi.gr/en/research/research-strategy/
Students University Life, Uoi	https://uoi.gr/en/education/university-life/
Klaipėda University	https://www.ku.lt/en/
Faculty of Social Sciences and Humanities, Klaipėda University	https://shmf.ku.lt/en/
Department of Pedagogy, Klaipėda University	https://shmf.ku.lt/en/structure-1/departments-1-1/departament-of-pedagogy
Library, KU	https://vb.ku.lt/discovery/search?vid=370LABT_KU:KU&lang=en
Virtual Learning Environment (VLE)	https://vma.ku.lt/?lang=en

Annex VI. Joint International Master AI4DLG - Participating Members



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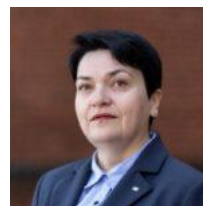
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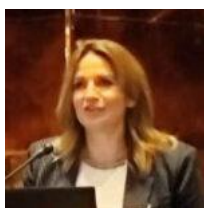
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