MASTER IN INSTRUCTIONAL DESIGN FOR ONLINE EDUCATION

PROGRAMME STRUCTURE

Hours of total learning: 2.250
Total Contact Hours: 450
Supervised Placement and Practice Hours: 400
Self Study Hours: 600
Assessment Hours: 800
Program Credits: 90 ECTS
EQF/MQF level 7
Duration: 18 months- 72 weeks
Mode of Delivery: Fully Online Learning
Language of Instruction: English
Mode of Attendance: Full Time

The programme structure includes different study and assessment materials and activities that will be developed in a synchronous and asynchronous modality for each module of the course.
The following units will be delivered asynchronously:

- Pre-recorded lectures
- Assignments
- Project and research activities

To guarantee direct interaction among students and professors, and to monitor the students' progress and results, the following units are offered synchronously:

- Webinars (live class sessions)
- Forums
- Synchronous sessions (one-to-one meetings with tutors or professors)

In addition, the following involve synchronous invigilation so as to maintain the integrity of the exam and assessment model:

- Mid-term assessment
- Project and research-based activities
- Final exam (open question)

The master's degree lasts 18 months and is divided into 3 semesters of 6 months each. Each semester includes:
1st semester: 4 courses
2nd semester: 4 courses
3rd semester: 2 course + final project

The master lasts 18 months and awards students 90 ECTS.
The programme is structured in 3 semesters of 6 months and includes the following 10 modules and a final project work.

Module/Unit Title	Compulsory (C) or Elective (E)	ECTS (Figures must be whole integers and with a value of at least 1 ECTS)	MQF Level of each module	Mode of Teaching (Lectures, workshop, placement, asynchronous, forums, VLE, etc.)	Mode of Assessment (Examination, assignment, project, blog, etc.)
Curriculum design	C	8	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Education technologies	C	6	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Instructional methods and strategies	C	8	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Adult education and lifelong learning	C	6	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Online education model design	C	8	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
LMS and VLE	C	8	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Online education evolution	C	6	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Education leadership and management	C	6	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Instructional Design	C	8	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Innovative education tools and services	C	6	7	Pre-recorded lectures, webinars, forums, synchronous sections	Mid-term assessment Final exam open question
Project Work	C	20	7	Personalised assessment and guidelines given by the instructor	Project work design and development and presentation of the final results to the master committee

CURRICULUM DESIGN: MQF/EQF Level 7 – 8 ECTS

The course provides an overview of online curriculum development and an introduction to the instructional models. Through the course, students will learn to design and evaluate curriculum, develop instructional materials, assess student learning, and measure instructional outcomes based on specific LOs and on the training needs of the target students. The topics of the course include preparation of online course outlines and syllabi, development of lesson plans, use of digital tools and instruments, and an explanation of how learning objectives and evaluation strategies affect the selection of content, study material, and assessment methods. This course provides students with the skills and knowledge needed to develop a systematic approach to curriculum design through which learning objectives are met with assessment strategies, exams, content, subject matter analysis, and interactive activities.

EDUCATION TECHNOLOGY: MQF/EQF Level 7 – 6 ECTS

The purpose of this course is to develop a deep understanding of technology integration across the various content areas. The course focuses on how educators can leverage technologies as a tool to simultaneously support curriculum standards and the goal of helping students become impactful digital citizens. Different theoretical perspectives on teaching and learning, including behaviorist, cognitivist, cognitive constructivist, sociocultural, and social cognitive, will be presented to make students able to investigate the conceptual framework of education technology integration, as well as current research trends and challenges associated with emerging learning technologies. Through the course, students will reflect on the role that digital technology can play in the teaching/learning process and on the challenges of technology integration into the classroom. These challenges include the limitation of face-to-face contact with the instructor in digital contexts that require significant adaptation, support, engagement, and the ability to handle conflicting time demands. Additional aspects such as equity in online classrooms will be investigated through the course to analyze the positive impact of online education in reducing prejudicial bias.

INSTRUCTIONAL METHODS AND STRATEGIES: MQF/EQF Level 7 – 8 ECTS

This course focuses on understanding theories and strategies that address the needs of a diverse population that composes today's classrooms. It will provide an integrated coverage of methods of classroom instruction, management, and assessment. Topics covered include diversity issues, planning techniques, effective teaching strategies, differentiated instructional and assessment strategies, motivational concepts, and informal and formal assessment practices. The methodology of the course will include practicum, lesson construction, practice teaching, in-class simulations through the webinars, discussion of readings, and exams. Students should leave feeling well-prepared in the art and science of teaching, and be competent in several critical teaching practices.

ADULT EDUCATION AND LIFELONG LEARNING: MQF/EQF Level 7 – 6 ECTS

The course provides a historical overview of adult education and lifelong learning and a grounded and well-structured knowledge of the methods, techniques, and strategies that support continuing education, focusing also on in-company training. It also analyses the use of different didactic methods to create training interventions that more closely fit people's needs, taking into account the demand of an evolving job market for continuous training and competency updating. Upon completion of the module, students will be able to identify development processes for adult and lifelong learners, as well as the roles and responsibilities of adult education providers in increasing lifelong learning opportunities associated with societal and demographic shifts.

ONLINE EDUCATION MODEL DESIGN: MQF/EQF Level 7 – 8 ECTS

Effective online instruction depends on learning experiences that are appropriately designed and facilitated by knowledgeable educators. This course prepares students to understand and analyse the different learning styles or combinations of styles, to design activities that include multiple methods and strategies for teaching and learning. Students will be exposed to diverse teaching models and learn how to adapt to new learning environments and to the different ways to develop collaborative, contextualised, and active learning in the online education context. During the course, the application of AI in online education will be presented to provide students with the knowledge to understand the use of AI algorithms for the analysis of learning styles, previous knowledge, and preferences.

LMS AND VIRTUAL LEARNING ENVIRONMENT: MQF/EQF Level 7 – 8 ECTS

The course surveys the field of eLearning, online education tools, and LMS, providing an overview of the VLE and its evolution. Leading learning management systems will be presented throughout the course to provide students with the technical framework needed to evaluate the effectiveness of the VLE and its impact on students' results. Students will be introduced to the analysis of the characteristics and tools of different LMS like Blackboard, Canvas, Moodle, Google Classroom, and others. Through the course, students will identify interoperability standards used in higher education, post-secondary, government, and industrial applications. They also gain design and development experience creating online learning modules for open-source eLearning platforms and systems.

ONLINE EDUCATION EVOLUTION: MQF/EQF Level 7 – 6 ECTS

The expansive nature of the Internet and the accessibility of technology have generated an increasing demand for web-based teaching and learning. This course offers an overview of distance learning and e-learning: its history, current status, and future progress. The main objective of the course is to analyse the impact that the progressive implementation of digital technologies has produced, by exploring the advantages and challenges of online education and the main issues related to the use of digital identity, the management of students with special needs, and the lack of on-campus interaction.
Topics covered throughout the course include AI applications in education and massive online teaching models known as "Connectivism and Connective Knowledge"

EDUCATION LEADERSHIP AND MANAGEMENT: MQF/EQF Level 7 – 6 ECTS

The course will introduce contemporary issues in researching educational leadership. It includes examining major schools of thought on educational leadership and analysing their applications and use in different social and cultural contexts. The course aims to provide education experts, teachers, and school leaders with the appropriate preparation to manage and direct traditional and online education projects and activities. Through the course, students will study and discuss a variety of selected topics pertaining to the beginnings of the modern organisation and leadership styles.

INSTRUCTIONAL DESIGN: MQF/EQF Level 7 – 8 ECTS

Instructional Design is the science and art of designing innovative, effective, and engaging training and educational programs in business and industry, schools, education institutes, and Higher Education. In the context of online education, instructional design includes assessing learning needs, designing the learning process in the VLE, creating rich learning experiences, developing multimedia study materials, and evaluating the effectiveness of a course. This is achieved by drawing on principles of andragogy and by applying instructional design theories and methods such as the ADDIE Model, Merrill's First Principles of Instruction, Bloom's Taxonomy, and Gagne's Nine Events of Instruction. The course provides the necessary knowledge and skills to identify instructional goals, conduct instructional analysis, and carry out the design, development, implementation, and evaluation phases of instructional design. The main course contents cover the fundamental instructional design processes, practices, and knowledge. Throughout the course, a set of outputs related to each phase of the different instructional design models will be created by the students. In addition to that, the module analyses the application of AI in Instructional Design for identifying learners' strengths and weaknesses and creating adaptive learning programs.

INNOVATIVE EDUCATION TOOLS AND SERVICES: MQF/EQF Level 7 – 6 ECTS

This course provides students with the appropriate set of knowledge and skills required to use apps and tools for digital education. Students will be exposed to the different applications of innovative digital technologies and will learn how to use software and apps to fulfill specific students' needs. Through practical tasks and active participation, the course offers hands-on experience of the impact of digital technologies on online collaboration and communication in different educational environments, from high school to higher and adult education.
The course will also provide step-by-step guidance on how to create quizzes and digital games, and on how to plan interactive online lessons to engage students.

PROJECT WORK: MQF/EQF Level 7 – 20 ECTS

The master's degree final project work involves the preparation of a report or written paper in which students demonstrate the knowledge and skills acquired during their studies. The project work is developed under the supervision of a faculty advisor. A project faculty advisor must be a member of the academic committee of the University and must agree to serve in this role. At the end of the module/unit, the learner will have acquired the responsibility and autonomy to:

- Ensure the appropriate evaluation of different academic material

- Carry out the major steps of the scientific approach (research design) or decision
- Comply with the analysis of different research sources
- Monitor the project development phases
- Ensure the appropriate application of the guidelines provided by the institution in developing the project work
- Be responsible for organizing the project structure