

Course Unit	Digital Resources and Technologies in Special and Inclusive Education	Field of study	Information and Communication Technologies
Master in	Special and Inclusive Education	School	School of Education
Academic Year	2025/2026	Year of study	1
Type	Semestral	Semester	2
Level	2-1	ECTS credits	6.0
Code	5073-800-1205-00-25		
Workload (hours)	162	Contact hours	T 10 TP 25 PL - TC - S - E - OT 10 O -

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Manuel Florindo Alves Meirinhos

#### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Understand the need to develop digital skills for the inclusion of children with specific needs in the digital society.
2. Know and use technologies to amplify human capacities in educational contexts.
3. Select, adapt, develop and exploit personalized digital resources.
4. Explore the potential of emerging technologies in special and inclusive education.

#### Prerequisites

Not applicable

#### Course contents

Inclusion in the digital society. Digital technologies and the amplification of human capacities. Digital educational resources. Emerging technologies in special and inclusive education.

#### Course contents (extended version)

1. Inclusion in the digital society
  - The digital transition and the need to develop skills.
  - The competency school and digital skills for the 21st century.
  - Info-exclusion.
  - Competences for inclusion in teacher digital competence standards.
2. Digital technologies and the amplification of human capacities
  - Universal design and digital technologies.
  - Assistive technologies.
  - Digital accessibility.
  - Digital technologies for optimizing cognitive development.
3. Digital educational resources
  - Education resources for specific needs.
  - Selection and adaptation of digital educational resources.
  - Creating and customizing digital educational resources.
4. Emerging technologies in special and inclusive education
  - Augmented reality in special and inclusive education.
  - Programming and robotics for capacity optimization.
  - Artificial intelligence in special and inclusive education.

#### Recommended reading

1. Daniela, L. (2022). Inclusive Digital Education. Springer.
2. Hijos, A. ; Coscolluela, C. (Coord. ) (2021). Inclusión educativa y tecnologías para el aprendizaje. Editorial Octaedro.
3. Marchena, C. (2018). Las TIC como Herramientas de Inclusión Educativa. Editorial Academia Española.
4. Ribeiro, J. (2019). As TIC e as Tecnologias de Apoio na educação de pessoas com necessidades educativas especiais. Instituto do Emprego e Formação Profissional, I. P. & CITEFORMA.
5. Weber, H. ; Elsner, A. ; Wolf, D. ; Rohs, M. ; Turner-Cmucha, M. (Eds. ) (2022). Inclusive Digital Education. European Agency for Special Needs and Inclusive Education.

#### Teaching and learning methods

Theoretical exposition of central themes, accompanied by analysis of documents and videos, followed by large group discussions. Analysis and discussion of practical cases. Flipped classroom. Online discussion forums. Seminars on digital initiatives and products for inclusion. Selection, adaptation and creation of digital resources for inclusion. Exploration of robotics and visual programming.

#### Assessment methods

1. Continuous Assessment - (Regular, Student Worker) (Final)
  - Development Topics - 40% (Group work reviewing the literature or practical exercises on a topic from the program.)
  - Practical Work - 10% (Planning and development of a personalized digital resource (individual work))
  - Portfolio - 50% (Individual portfolio of reflections and digital products produced)
2. Exam Assessment - (Regular, Student Worker) (Supplementary, Special)
  - Final Written Exam - 100% (Exam)

#### Language of instruction

Portuguese

## Electronic validation

Manuel Florindo Alves Meirinhos	Vítor Manuel Barrigão Gonçalves	Carla Isabel Pedroso de Lima da Conceição	Carlos Manuel Costa Teixeira
26-02-2026	16-03-2026	13-05-2026	13-05-2026