

3. COMPETENCIES

Core competencies

- CC1 Students can professionally apply their knowledge to their work or vocation and possess the competencies that are usually demonstrated through the development and defense of arguments and problem-solving within their field of study
- CC2 Students have demonstrated knowledge and understanding of an area of study that builds on the foundation of general secondary education and is usually at a level which, while relying on advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study
- CC3 Students can communicate information, ideas, problems, and solutions to both specialist and non-specialist audiences;
- CC4 Students can compile and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant social, scientific, or ethical issues
- CC5 Students have developed the necessary learning skills to undertake further studies with a high degree of self-direction

General competencies

- GC1 Critically understanding the interrelationships between various artistic disciplines and their philosophic trends through history and the evolution of aesthetic, historical, and cultural values.
- GC2 Knowing the vocabulary and concepts inherent to the digital art field.
- GC3 Participating in the management of the design and development of a digital product.
- GC4 Expressing ideas and concepts through the application of fundamental aesthetics and perception of an image in terms of structure, form, color and space for the creation of digital content.
- GC5 Analyzing context in general terms and, based on the compiled data, making decisions about the associated digital project according to the target audience and the established business model.
- GC6 Working in multidisciplinary work environments while displaying teamwork skills, versatility, flexibility, creativity, and respect for colleagues' work from other disciplines.

- GC7 Applying the creative fundamentals of idea generation in audiovisual projects for digital environments.
- GC8 Being familiar with the work environment, employability resources, and legal framework of the degree field.
- GC9 Optimizing work according to the technological resources of the processes and tools of the developing project.
- GC10 Applying the techniques and artistic tools associated with digital content generation.
- GC11 Synthesizing projects by expressing ideas and data, graphically and in writing, in a structured, organized, and understandable way.

Transversal Competences

- TC1 Being able to understand the definition and scope and put into practice management methodologies for technological development projects.
- TC2 Being familiar with the key actors in the sector and the complete life cycle of a project in the development and commercialization of digital content
- TC3 Knowing the hardware and software fundamentals of computers and communication networks as well as the principles of storage and cloud computing, along with their usefulness and application to digital economy development projects
- TC4 Being able to keep up to date with knowledge in the use of digital tools and technologies according to the current state of the sector and the technologies used.

Specific competences

- SC1 Executing drawing with traditional and digital techniques for both the conceptualization and rendering of images.
- SC2 Knowing and applying the basics of photography, the elements of visual composition, and the expressive value of lighting.
- SC3 Knowing and being capable of representing the anatomy, shape, and proportions of the human body.
- SC4 Representing shapes and spaces three-dimensionally, using the essential techniques of traditional and digital modeling.

- SC6 Applying traditional animation principles to the digital animation of characters and other elements.
- SC7 Using the principles and techniques of artistic creation for the conceptualization, design, and development of characters, environments, vehicles, and props.
- SC8 Creating audiovisual pieces by applying the principles of composition, audiovisual narrative, and graphics animation to the production, planning, editing, and postproduction of sequences and shots.
- SC9 Applying technical drawing to the representation of components or spaces.
- SC10 Using modeling techniques for the three-dimensional representation of shapes from a given design.
- SC11 Producing highly-finished images using the most appropriate tools for the project.
- SC12 Using the theory, techniques, and tools associated with lighting, rendering, and compositing.
- SC13 Creating a graphical document, demonstrating their technical and artistic skills.
- SC14 Knowing the methodology of synthesizing sound elements and the application of sound techniques in a digital product.
- SC15 Developing different types of scripts according to the target media.
- SC16 Identifying and differentiating styles and periods in cinema and animation history.
- SC17 Knowing the concepts and applying the tools and techniques for incorporating visual effects in an audiovisual project.
- SC18 Using texturing techniques to apply materials to 3D models.
- SC20 Conceiving, designing, and capturing through drawing, the design and construction of environments, landscapes, and scenes for their 3D construction
- SC21 Applying different techniques of experimental animation to produce an animation according to the target artistic and narrative style

In the 2D Animation Minor

- SC2D1: Reflecting the character's personality through 2D animation of their expressions, movement, and characteristic poses.
- SC2D2: Integrating 2D animated backgrounds and characters into a plane using 2D compositing and layout techniques
- SC2D3: Applying digital Ink & Paint techniques to create 2D animated characters and backgrounds.

In the Art for Videogames and Immersive Systems Minor

- SCAV1: Building rigs for video games from a given model, according to the constraints of real-time interaction with the character.
- SCAV2: Building and adapting 3D models and assets for their import and use in a videogame engine.
- SCAV3: Knowing the methodologies and main tools of dynamic simulation for creating visual effects in real time.

In the Advanced 3D Techniques for Animation

- SC3D2.- Building 3D rigs from a given model.
- SC3D3.- Knowing the internal structure of 3D scenes and being able to generate interfaces and automate effects in 3D software with code.
- SC3D6.- Knowing the methodologies and the main dynamic simulation tools for the creation of 3D visual effects.