

# OUTCOMES OF THE TRAINING AND LEARNING PROCESS

## 1. Knowledges or contents

- K1- Knowing the principles of game theory and psychology of gaming
- K2- Understanding game mechanics and their relationship with the experience of the user of an interactive application.
- K3- Knowing the basic techniques for the creation, modification and integration of images, videos, audio and 3D models required for the development of a game.
- K4- Relating the basic concepts of maths and physics for the generation of virtual environments.
- K5- Knowing the principles and paradigms of programming languages paying attention to control structures, variables, programming syntax and efficient memory use management.
- K6- Knowing the fundamentals in which human-machine interaction in technological products is based on.
- K7- Knowing the fundamental principles of accessibility and usability by which interactive products are governed.
- K8- Understanding the characteristics of information society, paying attention to the technological advancements and creative processes present in the sociocultural context from the 20th century to the present.
- K9- Relating the agents of the video game sector, the production processes of a project and the legal framework they imply.
- K10- Understanding the relationship between the different elements and processes involved in the production of a video game.
- K11- Knowing the primary tools that allows for the generation of content in video game projects.
- K12- Understanding visual storytelling and its relationship with audiovisual language to be able to tell stories through images and interactivity.
- K13- Knowing the artistic fundamentals involved in the realization of a video game in order to be familiar with the work of visual artists.

## 2. Skills or Abilities

- S1- Designing the levels of a video game, puzzles, quests, and the interaction involved in accordance with an in-development project.
- S2- Conceptually designing characters paying attention to the cultural and social requirements of the target audience to which the game is aimed at.
- S3- Composing the narrative and the script of a video game paying attention to its gameplay requirements.
- S4- Defining the mechanics and dynamic of the different elements and situations that comprise the interactivity between the video game and the user.
- S5- Applying technical and artistical foundations of modeling and texture creation specifically for video games, such as UVs, mesh types, adequate size of textures, etc.
- S6- Applying basic knowledge of programming in video game prototyping.

- S7- Applying theoretical-practical knowledge related to the aspects of design in video game ideation.
- S8- Setting up the elements of a video game, such as interface, gameplay or controls, to adapt them and making them accessible to different audiences.
- S9- Applying the workflows common for video games in project development.
- S10- Designing appropriate experiences for the users of technological products, both on a sensory level and in terms of usability and handling.
- S11- Solving the common issues that may arise during the design process of a video game, such as asset (objects, characters, environments) integration, bugs, etc.

### 3. Competencies

- C1- Conceptualising a video game design and adapting it to a given briefing considering technical, temporal, social and commercial requirements.
- C2- Collaborating with other team members with responsibility and commitment understanding the interdependencies between each other's tasks.
- C3- Solving the conflicts that may arise from the collaboration of different team members.
- C4- Managing time and technical and human resources of a project by defining workflows and tackling associated tasks.
- C5- Integrating the ethical knowledge acquired during all phases of video game development.
- C6- Managing the different technical processes and the interdependence between the different departments involved in the design and development process of a video game.
- C7- Organising creative work processes to achieve a balance between culture and industry in the product.
- C8- Elaborating, presenting and defending in front of a University Board an original academic paper, individually written, related to video game development, where the learning results of the degree are proven, following the Bachelor's Degree Final Project rules of the institution.
- C9- Integrate the knowledge acquired in a work or job training environment, within the field of video games.