

## Game Design & Development

This semester is for exchange students who study a bachelor in the field of Game Design at their home university. Game Design & Development will be offered for the first time in February 2024. The programme consists of a project worth 10 credits and four electives of 5 credits each. You can find the electives that you can choose from below.

### Courses

#### Project

Do you want to experience what it would be like to work in AAA game production? Do you want to experience working in teams of teams, focussing on your speciality whilst working with others to make a releasable game? Then the Project Triple A experience is for you: supported by coaches, you will design, develop and release a single game with the whole class. You will specialise in specific roles, such as management, production, development, art, game design or game marketing, and work in dedicated sub-teams to produce all the parts needed for a successful game launch. The project is individually assessed through a development portfolio and a Criteria Based Interview (CBI)

#### Credits

10

#### Interactive Environments

An increasing number of digital games are escaping the narrow boundaries of the traditional screen, keyboard, and game controller. Now favouring more innovative interaction methods such accessible technologies like smart sensors, projection mapping, and image recognition. A big part of bringing the gaming experiences to life is to consider how they could better integrate into real-world environments meaningfully. Games combined with real world interactions are a powerful way to convey messages that previously may have been hard to realize, whether it is for exhibits, museums, VR/AR escape rooms, or interactive art. During the Interactive Environments elective, you will get the chance to build such an interactive installation to communicate your own vision on a topical discussion in society. You follow a series of toolboxes and learn to implement a new technology. With your team, you concept and design an impactful message that impresses through innovative use of interactive environments.

#### Credits

## Creature Design

Fictional worlds are filled with incredible creatures, ranging from flying reptiles that breath fire, to long-legged bugs that carry people around. These creatures bring their environments to life, especially when they seem like a natural, realistic fit there. In the Creature Design elective, you will design and build an awesome, unique creature. You will start with exploratory research including worldbuilding and sketching your idea in 2D. Finally, you will create your creature in 3D, producing an HD, portfolio-ready render of it. This course will give you all the tools to design a convincing creature, that could live in the world you have created. Give more depth and realism to your concepts, develop your 3D skills, and build up your portfolio as an artist.

### Credits

5

## Unreal Engine

Over the past years Unreal Engine has become more prominent in the development of games, movies, and architecture. As one of the top tier game engines, Unreal Engine 5 has amazed the general audience with its open and real-time 3D creation tools. With its industry-leading lighting engine and nanite technology, game design is being pulled into the future. In the Unreal Engine elective, you will add vital skills to your portfolio that you can use in industries ranging from architecture visualisation, game development, series and movie productions. You will choose one of the offered templates and will design a product that fits within it, developing the product throughout the elective. Always wanted to learn Unreal Engine, but you've been postponing until now? Combat that and join the elective for Unreal Engine.

### Credits

5

## Serious Game Design

The most natural way of learning is by playing. As a kid we already learn social and practical skills by playing games with others. Now education has caught up – we can use games to teach all kinds of skills and knowledge, such as training doctors to use new equipment, motivating children to learn about culture, or promoting healthy habits in teens. These kinds of developments are what we will be exploring. In the Serious Games elective, you will create a serious game to solve a real-world problem for an actual client. You will learn how to create and facilitate serious games to help others learn and grow. Throughout the course we will play serious games to get an understanding of the process, use, and outcomes of serious games, as well as how to make games that change the world for the better.

## **Credits**

5

## **Artificial Intelligence**

For most of history, intelligence seemed a trait exclusive to biological life. But as machines increase in ingenuity and computing power, implementations of Artificial Intelligence (AI) come ever closer to the 'real' thing. Inventions we take for granted now seemed magical not long ago. The field of AI is evolving rapidly and revolutionizing the field of Creative Media & Game Technology. New developments such as art and level generation, automatic upscaling of old textures, and deep reinforcement learning for AI have large impacts on the industry. The Artificial Intelligence elective prepares you for working in a field where new AI techniques and technologies come your way constantly. At the start of this course, you individually select an AI technology and explore its potential with research, implementation, and experimentation. You create a prototype which implements the chosen technology, as well as material for a toolbox that helps future students working with the chosen technology.

## **Credits**

5

## **Narrative Design**

What drives you to keep playing: game mechanics or game narrative? Being able to connect your story to game mechanics creates an interactive experience that will grip your target audience. To do this, we will challenge your outlook by exploring diverse storytelling, theme, interesting characters, plot conflicts, world building, and other narrative design elements. The Narrative Design elective allows students to weave a strong narrative by looking at the entirety of their game to tell its story, including mechanics and features, while applying diverse perspectives. Ultimately, you will combine this knowledge to create a compelling Narrative Design Document with an accompanying Visualization.

## **Credits**

5

## **Rapid Prototyping**

This course offers weekly challenges in which you to create small games/PoCs based on a theme. You are allowed to use existing code and assets (within copyright of course) and will be graded on your best 3 prototypes.

## **Credits**

## Game Audio

You will work on recording, mixing & mastering game related audio. You will do voice overs, dialogs, music, soundscapes, trailer SFX. This course offers an introduction into music theory, mic setup, stereo image, front to back (depth).

### Credits

5

## Monetization & Marketing in Games

Creating a game nowadays is no longer enough. Without thinking about how to make monetize your game, you have a very low chance on commercial success. This course deals with questions such as: can my game benefit from a free to play scenario or would a buy to play revenue model fit better. How ethical are the uses of micro-transaction and loot-boxes. How can we manipulate the player in spending money on your game and make him addicted to your game and should we do that (is that ethical)?

### Credits

5

## Procedural Assets

One of the big issues facing games today is the amount of assets that need to be created for even the simplest of games. One way of combatting this is to use procedural generation of assets/worlds etc. The elective focuses on procedural generation of assets using different techniques. The idea is to use the computer to create assets that can be used in a game or in a rendered animation using "rules" set by the designer. An example could be city generation using modular parts created in a DCC, exported into an engine or 3d models created using geometry nodes in Blender.

### Credits

5

## Robots

You will make creative designs for a robot that fulfills a variety of mobility and dexterity challenges, learning to combine digital concepting with physical technology. You will learn to work with 3D spatial design, electronics, solid modelling and kinematic programming.

## **Credits**

5

## **Developing for Mobile Phones**

This course takes you through the process of developing for mobile and publishing. You will work on an individual, self-driven project to create and publish an app or game with the goal of expanding your Showcase Portfolio.

## **Credits**

5