Course name: 205 "Video Game Design Theory" [9 ECTS]

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**Description:** This course presents the theoretical and practical knowledge underpinning the design of video games. The course introduces concepts of formal systems, game rules, questions the nature of the game and the video game, introduces concepts linked to the creation of physical games (board games, escape games). Lessons are dispensed on the subject of game systems and their balancing, the design of interactive agents from the angle of game design, the principles of systemic design, the principles of procedural level generation, and on the tools for formalizing game design. Lastly, lessons are given to cover game design research from various disciplinary perspectives (IT, sociology, psychology), research methodologies, and an introduction to scientific knowledge useful to the design of video games (motivation theories).

Prerequisites: A basic knowledge of video game analysis.

**Learning**: Gaining an overview of the fundamental theoretical concepts behind game design. Applying various game design formalisation techniques.

Designing and balancing a video game system.

Designing and assessing a physical game.

Knowing and understanding the principle of scientific research and their application to game design.

## Assessment methods:

**Session 1:** Average of several group formalisation and design submissions.

**Session 2:** Individual written dossier of around ten pages on a set game design subject, including a summary of theoretical know-how and several practical applications on which a comparative analysis is carried out, as well as a 5-minute video summarizing the content of the dossier.