

VR/AR Game Design (AD-041)

(VIRTUAAL- JA LIITREAALSUSE (VR,AR) MÄNGU DISAIN) (Дизайн игр VR/AR)

SUBJECT DESCRIPTION

Credits (ECTS)	3.00 ECTS
Assessment	grading

Aim of the subject and short description

The objective of this course is to introduce students to the fundamental principles and techniques for designing interactive experiences in Virtual Reality (VR) and Augmented Reality (AR) environments. Students will explore the unique challenges and opportunities presented by immersive environments, focusing on user experience, interaction design, spatial storytelling, and performance optimization.

Throughout the course, students will gain hands-on experience with industry-standard tools such as Unity and Unreal Engine, developing prototypes that demonstrate key VR and AR design concepts. Emphasis will be placed on understanding player perception, designing intuitive interactions, and optimizing content for real-time performance.

Through a combination of theoretical discussions and practical assignments, students will develop a foundational understanding of immersive technology and its applications in game design.

Learning outcomes:

Student:

- 1. will be able to apply fundamental design principles for VR and AR applications;
- 2. will be able to develop interactive experiences that consider user movement, perception, and engagement;
- 3. will be able to optimize performance for VR and AR hardware constraints;
- 4. will be able to prototype and test VR/AR mechanics using appropriate development tools.