

Games and Entertainment Technology

[See study programme](#)

Autumn 2023 (1. semester)

Programming Fundamentals	SPO1110 10 sp
Game Development with GameLab 1	SPO1004 10 sp
Foundation of Drawing and Digital Painting	SPO1005 10 sp

Spring 2024 (2. semester)

Game Lab 2 - Learning from History	SPO1311 10 sp
Media and Games – History and Culture	SPO1006 10 sp
Programming 3D Games	SPO1000 10 sp

Autumn 2024 (3. semester)

Game Lab 3 - Serious Games	SPO2110 10 sp
Ethics and Professionalism	SPO1007 10 sp
Sound for Games	SPO1003 5 sp
Programming Online Apps	SPO2160 5 sp

Spring 2025 (4. semester)

Game Lab 4 - Entertainment Technologies	SPO2120 10 sp
Entertainment Technologies and Game Design	SPO2003 10 sp

Autumn 2025 (5. semester)

Game Lab 5 - Games for learning

SPO2005

10 sp

Artificial Intelligence for Games

SPO2001

10 sp

Research Methods

MET1003

10 sp

Spring 2026 (6. semester)

Game Lab 6 Capstone Project

SPO2161

20 sp

Mobile Networked Apps

SPO2007

10 sp

Programme description

The study programme gives practical, job related knowledge on developing digital products, services and games for different target audiences. It focuses mainly on developing digital content like online services, games and products related to training, events, entertainment, advertising and such.

The candidate will get a solid foundation in programming, traditional art, game design, 3D game asset creation and ludology. All teaching is in English. The candidate will learn computer programming and use advanced computer software and tools to create exciting games and online interfaces (2D and 3D), mobile services, online sites and custom made units for entertainment and information.

Goals

The overall goal of the study programme is to give the candidate knowledge and skills needed to develop digital services, presentations and games for use in mobile units, training, events, services and entertainment. This competence will consist of knowledge from different fields like programming, game design, user interface building, pedagogy, simulations, game development and maintenance and distribution of such digital systems.

Content

The study programme offers subjects that provide the knowledge and skills to develop services, presentations and games:

- game design and development
- game programming and animations (in 2D and 3D)
- mobile technologies and databases
- project management, innovation and entrepreneurship

Game design and development

During the first year the candidate will learn about design principles for game development and how to develop games for web deployment. This founds the basis for further development of more advanced games created in subjects in the 2nd and 3rd year. Classes also focus on skills like storytelling and drawing. The ethical and cultural

aspects of making video games for a global audience is also addressed.

Game programming and animations (in 2D and 3D)

Some subjects will give the candidate deeper understanding of programming and animation in a 2D and 3D setting. Additionally s/he will learn skills and gain knowledge in developing, managing and documenting games with the proper functionality and interface to give users a good experience.

Mobile technologies and databases

Developing modern video games also requires understanding of data storage and information management and how to utilise this when creating games and exchanging data across the internet. Knowledge and skills regarding databases, video game engines and cellular networks requirements and limitations also forms an important part of the programme.

Project management, innovation and entrepreneurship

The study programme focuses throughout all terms on projects and teamwork. The candidate will be working with external companies and organisations learning how to communicate with them while handling situations and problems individually and as a team. In this programme, innovation and entrepreneurship is an integral part of several subjects, most pronounced in Game Lab. Many candidates also choose to start student companies, and the school provides support and facilities for this.

Game Lab

The Game Lab is an intensive company simulator. Candidates form their own companies with team leads, art leads and technical leads. They then pitch a game project of their own design, or for an external client. The student company builds the game over the period of a semester, with each candidate specialising in a topic for the final output to be a fun, playable game prototype, ready for submission to competitions and festivals.

Learning outcomes

Upon successful completion of this programme, the Candidate will have:

Knowledge

thorough knowledge of the field of game design

advanced knowledge of programming languages relevant for game development

advanced knowledge of developing and implementing simple animations to be used within digital games

advanced knowledge of 3D modeling, rigging and rendering

advanced knowledge of themes in innovation and entrepreneurship, relevant to the field of game development

advanced knowledge of sound production and the importance of the sound experience in digital games

advanced knowledge of the history, ethics, moral, laws and regulations relevant to the field of game development

Skills

advanced knowledge of project planning, project management and documentation

advanced skills in process management for development projects, looking to develop digital products

advanced skills in programming and programming languages that are relevant for game development

advanced skills in developing and implementing simple animations to be used in digital games

advanced skills in 3D modeling, rigging and rendering

advanced skills in sound production for creative digital products

basic art skills required for communicating and sketching creative ideas and concepts

General competence

thorough knowledge in the field of ethics, culture and society

thorough knowledge of gaming addiction and how to handle this, seen from a game developer's perspective

thorough knowledge of collaborative learning and the importance of good communication and routines to keep a flow in game development projects

Admission requirements

Higher education entrance qualification

Documented proficiency in English language

Applicants will be asked to submit an example of relevant artistic work and a motivational letter.

Information about submission of portfolio/showreel and motivational letter will be sent out to the applicants after the deadline for application.

Applications are open in the following periods: Non-EU/EEA: November 1 - December 1 // EU/EEA and Nordic residents: February 1 - April 15

Career possibilities

The programme qualifies for jobs in developing games and digital products within fields like video games design and production, entertainment, publishing and advertising.

Further education

Successful completion of this bachelor's programme qualifies candidates to apply for relevant master's programmes.

Study abroad

Studying for one term at an international university as part of the study programme is becoming more common. Get in touch with the teachers or counsellors at campus after starting the programme to get further information of the possibilities. Students can primarily go on exchange in the fourth semester of the programme.

Per January 1st, 2022, the programme is connected to the following institutions on Erasmus+ Exchange agreements: U-TAD (Spain), Breda University of Applied Sciences (Netherlands), Saxion University of Applied Sciences (Netherlands) and Complutense University of Madrid (Spain)

Costs

Costs for semester registration and course literature apply.

The candidate is required to use their own laptop computer capable of running the software being used in the study programme. The candidate must bring the computer every day for classes or study work. Minimum requirements for this computer can be found at the university website.

Additionally the candidate must provide data storage of their own that covers their need for storing files in all subjects.

Assessment methods

Based on what's appropriate and beneficial for each subject the study methods will vary. The most common are portfolios, project reports, off premises exams and traditional written or oral exams.

Programme evaluation

The programme is evaluated via student questionnaire, as well as by the programme director. The evaluations form a part of the University's quality assurance system.

Qualifications requirements and regulations

Please refer to the applicable legislation, regulations and related guidelines.