

**SYLLABUS**

**STUDY YEAR 2024/2025**

# **Bachelor Programme in Computer Graphics for Games and Film**

## **Enrollment semester Autumn 2024**

DATE

**2023-10-12**

REFERENCE NO.

**LTU-4268-2023**

DECISION MAKER

**Dean of the Faculty of Science and Technology**

## Programme content and structure

Computer graphics for game and film is a three-year education (180 credits) that leads to a Bachelor degree in Media technology with a focus on computer Graphics for game and film. The program consists of courses in the main area Media technology and a compulsory thesis project. The program includes both theoretical and practical learning that provides a broad foundation in computer graphics and the ability to be part of a team for production of computer graphics for computer games and visual filmeffects. Key areas of education are principles, methodology and design processes for creating computer graphics for film and games as well as practical application in digital tools.

For admission to the degree project course entry requirements specified in the course syllabus must be completed. Information regarding the application and admission process is given and ensured by the responsible department.

The education leads to a Degree of Bachelor as the mathematics requirement for the suffix "of Science" is not met.

Students admitted H21 to Higher Education Diploma Programme in Computer Graphics for game and film (120 credits) must, in order to fulfill the requirement for a bachelor's degree majoring in Media technology with a focus on Computer Graphics for Games and Films, take the course "Complementary course for the Higher Education Diploma Programme in Computer Graphics for game and films" of 45 credits, incl. "Degree Project in Computer Graphics, Bachelor" of 15 credits and fulfill the requirement for a university degree with a specialization in computer graphics for games and film.

### Credits

180 credits

### Degree

- Degree of Bachelor - Major; Media Technology with specialisation Computer graphics for game and film

## Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and have documented skills in English language + Upper secondary school courses English 6, Mathematics 2a or 2b or 2c.

### Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

## Compulsory courses

### Compulsory courses 150 credits

Course code	Course	Cr	Level	Comment
W0012E	Introduction to Computer Graphics	15	Bachelor's level	
W0013E	Design processes and methods for Computer Graphics	15	Bachelor's level	
W0019E	3D Graphics	7.5	Bachelor's level	
W0020E	Animation and Rigging	7.5	Bachelor's level	
W0021E	Realtime Graphics	7.5	Bachelor's level	
W0024E	Compositing	7.5	Bachelor's level	
W0026E	Advanced 3D graphics	7.5	Bachelor's level	
W0027E	Visual effects and simulation	7.5	Bachelor's level	
W0028E	Scripting for computer graphics	7.5	Bachelor's level	
W0029E	Applied mathematics for computer graphics	7.5	Bachelor's level	
W0030E	Professional practices	15	Bachelor's level	
W0034E	Studio production practices	15	Bachelor's level	
W0035E	Specialisation project in computer graphics	15	Bachelor's level	
W0036E	Professional studio production	15	Bachelor's level	

### Compulsory courses 15 credits

Course code	Course	Cr	Level	Comment
W0031E	Degree Project in Computer Graphics, Bachelor	15	Bachelor's level	

### Optional space with a suggestion of a course, that can be exchanged for other courses 15 credits

Credits för optional courses is 15 credits. Within the optional space of the programme it is possible to chose optional courses. The given number of credits must be met for degree.

Course code	Course	Cr	Level	Comment
W0032E	Profession specialism	15	Bachelor's level	Selectable

## Study schedule

### Year of study 1 Enrollment semester Autumn 2024, Is offered in 2024/2025

Study-period	Course code	Course	Cr	Comment
1	W0012E	Introduction to Computer Graphics	15	
2	W0013E	Design processes and methods for Computer Graphics	15	
3	W0019E	3D Graphics	7.5	
3	W0020E	Animation and Rigging	7.5	
4	W0024E	Compositing	7.5	
4	W0028E	Scripting for computer graphics	7.5	

### Year of study 2 Enrollment semester Autumn 2024, Is offered in 2025/2026, planned study schedule

Study-period	Course code	Course	Cr	Comment
1	W0021E	Realtime Graphics	7.5	
1	W0026E	Advanced 3D graphics	7.5	
2	W0027E	Visual effects and simulation	7.5	
2	W0029E	Applied mathematics for computer graphics	7.5	
3	W0030E	Professional practices	15	
4		Credits för optional courses	15	
4	W0032E	Profession specialism	15	Selectable

## Year of study 3 Enrollment semester Autumn 2024, Is offered in 2026/2027, planned study schedule

Study-period	Course code	Course	Cr	Comment
1	W0034E	Studio production practices	15	
2	W0035E	Specialisation project in computer graphics	15	
3	W0036E	Professional studio production	15	
4	W0031E	Degree Project in Computer Graphics, Bachelor	15	Entry requirements