

Module: 3DGame-Prototyping

Level	Bachelor	Short Name	3DGP
Responsible Lecturers	Prof. Isabella Beyer		
Department, Facility	Electrical Engineering and Computer Science		
Course of Studies	Information Technology and Design, Bachelor		
Compulsory/elective	Compulsory elective	ECTS Credit Points	5
Semester of Studies	(Unspecified)	Semester Hours per Week	4
Length (semesters)	1	Workload (hours)	150
Frequency	(Flexible)	Presence Hours	60
Teaching Language	German/English	Self-Study Hours	90

The following section is filled only if there is **exactly one** module-concluding exam.

Exam Type	Portfolio Exam	Exam Language	German/English
Exam Length (minutes)		Exam Grading System	One-third Grades
Learning Outcomes	<p>The students know:</p> <ul style="list-style-type: none"> - The added value of gaming approaches - Differences between 2D and 3D games in production - Knowledge transfer using a playful approach - Storytelling and conception of 3D games - 3D game prototyping 		
Participation Prerequisites			

The previous section is filled only if there is **exactly one** module-concluding exam.

Consideration of Gender and Diversity Issues	<ul style="list-style-type: none"> ✓ Use of gender-neutral language (THL standard) ✓ Target group specific adjustment of didactic methods ✓ Making subject diversity visible (female researchers, cultures etc.)
Applicability	
Remarks	

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Course Type	Lecture	Form of Learning	Presence
Mandatory Attendance	no	ECTS Credit Points	2
Participation Limit		Semester Hours per Week	2
Group Size		Workload (hours)	60
Teaching Language	German/English	Presence Hours	30
Study Achievements ("Studienleistung", SL)		Self-Study Hours	30
SL Length (minutes)		SL Grading System	

The following section is filled only if there is a course-specific exam.

Exam Type		Exam Language	
Exam Length (minutes)		Exam Grading System	
Learning Outcomes			
Participation Prerequisites			

The previous section is filled only if there is a course-specific exam.

Contents	<p>In this module, the students learn the conception, design, and implementation of 3D gaming applications.</p> <p>The students are introduced to the Unity3D game engine and develop small prototypes with it.</p> <p>The focus is on gaming and game development. Competence in 2D and 3D gaming will be developed, and the differences will be highlighted.</p>
Literature	<ul style="list-style-type: none"> • Yu-kai Chou (2017), Actionable Gamification: Beyond Points, Badges, and Leaderboards • Freyermuth, G.S. (2015), Games, Game Design, Game Studies: Eine Einführung (Edition Medienwissenschaft) • Beyer, I. (2015), '360°-Darstellungskonzepte im Wandel der Zeit' Institute for Immersive Media (ED) • Jahrbuch immersiver Medien, Die mediatisierte Gesellschaft: Leben und Arbeiten mit immersiven Medien, Coburg: Schüren, pp. 53–62. • Beyer, I. (2014), 'Le Passage – an archaeology of spatial transitions', Ubiquity: The Journal of Pervasive Media 3: 1, pp. 51–65, doi: 10.1386/ubiq.3.1.51_1

- *McGonigal, J. (2012), Reality is Broken: Why Games Make Us Better and How They Can Change the World*

Remarks

Module Course: 3DGame-Prototyping

(of Module: 3DGame-Prototyping)

Course Type	Practical Training	Form of Learning	Presence
Mandatory Attendance	yes	ECTS Credit Points	3
Participation Limit		Semester Hours per Week	2
Group Size	12	Workload (hours)	90
Teaching Language	German/English	Presence Hours	30
Study Achievements ("Studienleistung", SL)		Self-Study Hours	60
SL Length (minutes)		SL Grading System	Participation

The following section is filled only if there is a course-specific exam.

Exam Type		Exam Language	
Exam Length (minutes)		Exam Grading System	
Learning Outcomes			
Participation Prerequisites			

The previous section is filled only if there is a course-specific exam.

Contents	<p>In this module, the students learn the conception, design, and implementation of 3D gaming applications. The students are introduced to the Unity3D game engine and use it to develop small prototypes.</p> <p>The focus is on gaming and game development. Skills in 2D and 3D gaming will be developed, and the differences will be highlighted.</p>
Literature	<ul style="list-style-type: none"> • Yu-kai Chou (2017), Actionable Gamification: Beyond Points, Badges, and Leaderboards • Freyermuth, G.S. (2015), Games, Game Design, Game Studies: Eine Einführung (Edition Medienwissenschaft) • Beyer, I. (2015), ‚360°-Darstellungskonzepte im Wandel der Zeit‘ Institute for Immersive Media (ED) • Jahrbuch immersiver Medien, Die mediatisierte Gesellschaft: Leben und Arbeiten mit immersiven Medien, Coburg: Schüren, pp. 53–62. • Beyer, I. (2014), ‚Le Passage – an archaeology of spatial transitions‘, Ubiquity: The Journal of Pervasive Media 3: 1, pp. 51–65, doi: 10.1386/ubiq.3.1.51_1 • McGonigal, J. (2012), Reality is Broken: Why Games Make Us Better and How They Can Change the World • Huizinga, J. (2004), Homo Ludens: Vom Ursprung der Kultur im Spiel
Remarks	