Title	Game Engine Development
Cluster Title PO 07 To be filed by focus managers s.u.	
Cluster Title PO 2012 To be filed by focus managers s.u.	
Cluster Title PO 2014 To be filed by focus managers s.u.	Game Development
Date of first course event / first organizational meeting with students***/ Room**	23.10.23 19:00 - 22:00 NN
kind of room if not indicated above	online X **Seminarraum** **Labor**

Belegung über OBS
05.10. - 10.10.2022 14:00

Course Data			
	credit points		5 credit points
	workload/semester		125-150 h
	presence/week on average**		4 SWS
	Group size according to cnw		
	Min. size		8 students

						weekday of course	MON
	frequency of course-events	weekly		bi-weekly		blocked	
	prospective timeframe**** (Block = 90 min)	Block 1 **8:30**		Block 2 10:15		Block 3 12:00	
		Block 4 **14:15**		Block 5 16:00		Block 6 **17:45**	x
	course language			English	x	German	
	suitable for students of course/focus			**DM**		**AG**	x
				IMD		**MP**	
				SMP		**ER**	x
				OJ/WJ/OK		**KMI**	x
Content(s): (check one or more)		Design		Informatics / Technology	x	Economy / Business	Culture
Time frame in case of blocked event		19:00 – 22:00					

Course Portrait	
Lecturer(s) Name(s)	Thomas Valentin Klink
Lecturer(s) email	thomask@crytek.com
Contact Prof. @ fbmd	Tilmann.kohlhaase@h-da.de
Teaching Method	lecture lecture + seminar x seminar project
Course Contents	Modern games are usually created using a ready-to-use game engine. In this elective we want to take a peek at how those game engines work and how they manage to combine rendering, physics, entity systems, levels, assets etc. in one coherent package. We are going to write a simple 2D engine in C++ and touch on a lot of different subjects to give some insight into how Unity, Unreal or Godot work under the hood. **Prerequisites:** Basic knowledge in C++ is preferred, at minimum knowledge of C# is required
Type of Exam	homework work+presentation paper

Milestones if known		
		Examination
		Examination / Presentation
End of Elective		
Suitability		beginner course intermediate course advanced course
Preconditions		Prerequisites: Basic knowledge in C++ is preferred, at minimum knowledge of C# is required
Info about lecturer (especially if guest)		Valentin Klink is Senior Gameplay Programmer at Crytek
Other information		

* According to our examination law, the course titles have to be matched to a given catalogue with common course titles. This title will appear in the Transcript of Record and the Bachelor Certificate. Field has to be filed by Focus Managers, all clusters can be found below
** The official presence-time is 3 SWS for the whole semester. As the elective period is condensed to 12 weeks instead of 16 weeks, the presence time for the electives is 4 SWS.
*** Courses and focal points: er = Expanded Realities , oj = Online Journalismus; wj = Wissenschaftsjournalismus, blank field = please insert appropriate course. *(check as many as apply)*
**** Block 1 = 8.30 - 10.00 Uhr, Block 2 = 10.15 - 11:45 Uhr, Block 3 = 12.00 - 13.30 Uhr, Block 4 = 14.15 - 15.45 Uhr, Block 5 = 16.00 - 17.30 Uhr, Block 6 = 17.45 - 19.15 Uhr
***** In case that the course does not start in the first week 15.10.2018 there has to be a first organisational meeting to finalize the application process

Elective Start: 16.10.2023
Chrismas 23.12.-7.1.24 (due to the short semester there might be some flexibel lecturing during this period.,)
Electives End 16.2.2024 (Examinations could be scheduled after this date if necessary)

Please upload in Moodle Course!