

Elective Course Description Winter Term 2020/2021

Title	Introduction to Graphics / Shader Programming				
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.					
Date of first course event / first organizational meeting with students****/ Room	NN		NN		NN
kind of room if not indicated above	Hörsaal online		Seminarraum		Labor

Belegung über OBS
13.10. - 26.10.2020 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		
	6.4.20– 3.7.20						
	weekday of course						
	frequency of course-events	weekly		bi-weekly		blocked	x
	prospective timeframe**** (Block = 90 min)	Block 1 8:30	x	Block 2 10:15	x	Block 3 12:00	x
		Block 4 14:15	x	Block 5 16:00	x	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		Economy / Business		Culture
Time frame in case of blocked event	Attention- Elective takes place during semester break! 4.1.-8.1.2021						

Course Portrait	
Lecturer(s) Name(s)	Paul Nasdalack
Lecturer(s) email	info@paul-nasdalack.com
Contact Prof. @ fbmd	Tilmann.kohlhaase@h-da.de
Teaching Method	lecture lecture + seminar seminar project
Course Contents	Shaders are cool and shiny but sadly only few people actually know how they work, even though they are not too hard to understand. In this elective we'll cover shader development from the ground up. After a short introduction to GPUs and what makes them different to regular CPUs, we'll dive into the world of shader development. As shaders cover a huge variety of effects today, I'll leave it up to the course to decide, which effects we'll actually implement. These could include things like lighting effects, toon shading, post processing, vertex painting effects, particles, good looking water, a retro pixelate shader, and many more.

[illegible]

* 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 filled 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: dm = Digital Media , 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: 2.11.2020

Christmas 21.12.-9.1.21 (due to the short semester there might be some lecturing during this period)

Electives End 12.2.2021