Realtime Art & Visual Effects

Master

competent
relevant
sustainable

Study Programme

Embark on an evolutionary educational journey that merges art with groundbreaking techno-logy. Our Master's programme in Realtime Art & Visual Effects integrates the principles behind leading realtime graphics platforms and intricate procedural generation tools. It's about mastering the interplay of creativity and technology, and spearheading the next era of immersive digital narratives.

The T-Shaped Advantage

In the ever-evolving landscape of the creative and digital realm, adaptability is key. The T-shaped generalist model is central to our curriculum, equipping students with a blend of specialized knowledge and broad understanding. This approach prepares graduates to excel in their core domain while understanding and bridging interdisciplinary boundaries, crucial for success in dynamic creative environments. In the final semester, each student embarks on a compre-hensive deep dive into a personal research project. Guided by individual supervision from an industry expert, this immersive journey culmina-tes in their final master thesis, showcasing their prowess and specialized insight in the field.

Future-Forward Career Opportunities

Graduates are primed for a vast spectrum within the creative industry and beyond. Opportunities range from creating VR/AR/XR content, delving into VFX production, leading innovations in the world's largest entertainment sector - the gaming industry, to redefining film and TV with virtual production techniques. Beyond these established fields, new horizons open in sectors like auto-motive, data visualization, medical science, and educational technology.

Typical job titles include:
· Realtime-VFX Specialist
· AR/VR Content Developer
· Technical Artist
· Environment Artist
· Lighting Artist
· Simulation and Visualization Specialist
· Generative AI Artist
· Procedural Artist
· Virtual Production Artist

Collaborative Excellence

The programme's strength is magnified by the long-standing collaboration between the study programmes MultiMediaTechnology and MultiMediaArt. Integrating into this collaboration establishes a triangular project structure and curriculum design. Realtime Art & Visual Effects seamlessly integrates within the Department of Creative Technologies, championing an inte-grative education model. This design promotes real-world collaboration among producers, technicians, and designers, mirroring industry expectations.

Find examples of master projects on our website:
https://portfolio.fh-salzburg.ac.at

Characteristics

Three Pillars, Endless Possibilities

Unlock your potential with our cutting-edge programme that focuses on three key areas of expertise:

Realtime Workflows
Dive deep into the world of realtime graphics, where the boundaries between interactivity and visualization merge seamlessly. Master the creation of breathtaking interactive applications while also leveraging realtime engines for non-interactive media, such as movies and other passive visual content. This mastery ensures a dynamic presence across various media platforms, from interactive to the silver screen.

Procedural Workflows
Transcend the traditional. Learn to replace conventional linear production with dynamic, system-oriented techniques, allowing for the creation of complex environments, mesmerizing effects, and radiant visualizations with both efficiency and artistry.

AI & Production Workflows
Explore where advanced technology enriches artistic endeavors. Learn the nuances of photo-grammetry for accurate environment replication and the art of performance capture for vivid digital characters. Step into virtual production, merging on-location shoots with realtime digital layers. With Generative AI, the potential of realizing ambitious creative concepts is enhanced, ensuring a holistic approach to digital storytelling.

Expertise at the Helm

Our teaching roster is comprised of industry luminaries, ensuring our curriculum remains at the cutting edge. Lecturers come equipped with hands-on experience from their tenures at global powerhouses such as Trixter, Rise Visual Effects, Industrial Light & Magic, Epic Games, Scanline VFX, Pixomondo, DNEG, and UBISOFT. This synergy guarantees students an education that is in sync with the latest industry standards and practices.

Industry Partnerships and Endorsements

Our programme boasts robust ties with a wide array of industry stakeholders, ranging from local pioneers to global frontrunners. At the inter-national level, our acclaim is underscored by endorsements from Epic Games, the creators of a leading game engine and SideFX, the masterminds behind a premier procedural-based platform. These partnerships have resulted in our esteemed recognition as an Unreal Academic Partner and a Side Effects Certified School.

Curriculum

Module	Course	Semester			
		1	**2**	**3**	**4**
Theory and Research					
	research & academics / IMPULSE | METHOD | FORM | SUPPORT | GUIDANCE	2 (1)	2 (1)	2 (1)	12 (2)
	technical / MATH & SCRIPTING | CODE & FORMAT	3 (2,5)	2 (2)		
	artistic / CAMERA & COMPOSITION / LIGHT COLOR MOTION	2 (1,5)	2 (1,5)		
	spatial / AESTHETICS & DESIGN			4 (2)	
Project Development					
	project + assistance		6 (2)	6 (2)	
Personal & Social					
	symposium / ETHICS & SUSTAINABILITY	1 (1)			
	process / CONCEPT | DECK & PITCH	3 (2)			
	process / TIMELINE & RESOURCE		1 (0,5)		
	process / COMMUNICATION & CONTROL			1 (0,5)	
	process / POLISH & PRESENTATION				2 (1)
	industry / CONFERENCE	0,5 (1)	0,5 (1)	1 (1)	
	industry / EMERGING TOPICS		1 (1,5)		
	industry / PORTFOLIO | COMPANY VISITS				2 (3,5)
Workflow Proficiency					
	realtime / VFX 1 / Particles	2,5 (1,5)			
	realtime / ENVIRONMENT	4 (3)			
	realtime / VFX 2 / Destruction		1,5 (1)		
	realtime / LIGHT		3 (2)		
	realtime / MOTION		2 (2)		
	realtime / RENDERING & COMPOSITING			3 (2)	
	realtime / VIRTUAL & MIXED REALITIES			2 (1,5)	
	procedural / WORKFLOW	4 (3)			
	procedural / ENVIRONMENT		4 (3)		
	procedural / ANIMATION / Character & Crowds			2 (2)	
	procedural / VFX 3 / Fluids			2 (1,5)	
	toolchain / 3D / Reconstructions	2 (1,5)			
	toolchain / PERFORMANCE / Capture		1 (1,5)		
	toolchain / PRODUCTION / Pipelines			2 (2)	
	toolchain / RENDERING / XPU			1 (1)	
	toolchain / AI / Prompt Engineering	2 (1,5)			
	toolchain / AI / Implementation		1 (1)		
	toolchain / AI / Experiments			1 (1)	
Electives[1]					
	Realtime Fundamentals	4 (2)			
	Digital Content Creation Fundamentals	4 (2)			
	Visual Scripting Fundamentals	4 (2)			
	Virtual Production		3 (2)	3 (2)	
Master Thesis					
	Master Thesis				10 (0)
	Master Exam				4 (0)
	ECTS (CHW)	**30 (21,5)**	**30 (22)**	**30 (19,5)**	**30 (6,5)**

[1] Choose one elective per semester

ECTS: European Credit Transfer and Accumulation System
CHW: contact hours per week per semester

This chart shows the curriculum only exemplarily.

Studying at Salzburg University of Applied Sciences

Salzburg University of Applied Sciences offers practical course content in line with the requirements of business and society. Qualified and experienced teaching staff from both scientific and practical fields guarantee an academic education of the highest standard. Together with the first-rate facilities in our lecture halls and laboratories, they provide the basis for a successful course of study. Our locations, offering a total of 18 bachelor programmes, 15 master programmes and further education possibilities, are situated in some of the most beautiful regions in the world. Whether you are an art and architecture buff, a music fan or a lover of the great outdoors, Salzburg combines historical heritage and modern lifestyle culture to offer something for everyone.

Urstein Campus: This modern building houses our central administrative offices and is where most of our degree programmes are taught. The campus is surrounded by greenery, next to the neighbouring medieval estate known as the »Meierei« and our new premises at the »Wissenspark«.

Kuchl Campus: This campus, built to contemporary »passive house« energy efficiency standards, is located amongst the greenery at the foot of the Tennengebirge mountains. Six of our degree programmes are based here.

Salzburg Campus (University Hospital LKH): Practical lessons and some of the tuition for degree programmes in Health Studies are held at the University Hospital in the city of Salzburg.

Schwarzach Campus (Kardinal Schwarzenberg Hospital): Our degree programme for Nursing is additionally held at the **»**Kardinal Schwarzenberg Klinikum**«** in Schwarzach (district of Pongau).

International: Gain experience abroad at one of our approx.190 partner institutions around the world. The global exchange of knowledge not only allows you to gain valuable insights into other cultures but also to make lots of new friends. Our International Office will assist you in organising a semester or placement abroad.

Career Center: We support students in planning their careers and entering the world of work. Students can benefit from exclusive free workshops on 'career planning' and a jobs and careers portal: www.fh-salzburg.ac.at/career-center

Sport: Our sports programme offers a wide range of courses and training sessions. Find out more at www.fh-salzburg.ac.at/sport

Living & studying: There is student housing located on the Urstein and Kuchl campuses. Please go directly to www.studentenheim.at for more information.

Public Traffic: There are excellent train and bus connections between all locations.

Urstein Campus

Kuchl Campus

Get to know us better:

Application & Admission

Study mode: full-time
Length of study: 4 semesters
Language of instruction: English
Degree awarded: Master of Arts in Arts and Design (MA)
Study places per year: 20
Location: Urstein Campus
Tuition: 363 Euro per semester + student union fee

Prerequisites for admission
· Relevant university degree (bachelor's or diploma degree) from a domestic or foreign institution of higher education or
· Non-subject-related degree with proof of 20 ECTS in digital content creation or software development
· English Level B2

Application procedure
1. Online application at:
   www.fh-salzburg.ac.at/online-application
   Submission of application documents: Curriculum vitae, study certificates and thesis, portfolio, letter of motivation
2. Interview

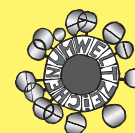**Application deadlines and updates can be found on our website.**

Further information
www.fh-salzburg.ac.at/rve-master

Student projects
portfolio.fh-salzburg.ac.at

An instituion of:

Accredited by: