

Master

part-time



FH Salzburg

Code and Interactive Systems

```
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  <body>
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```



Bright futures
in the making.

Study programme

Step into the future of digital innovation. This programme empowers creative minds and tech enthusiasts to shape tomorrow's interactive worlds – bridging cutting-edge software engineering, immersive media and intelligent technologies. Whether you want to design virtual realities, develop powerful web and mobile applications, or explore AI-driven media solutions, this master's programme equips you with the skills to create beyond boundaries.

Majors

You choose one of the two specialisations at the start of your studies:

Game & Simulation Engineering

Computer games serve as technology catalysts and trendsetters across industries beyond entertainment. This cutting-edge specialisation empowers you to design and develop advanced games and realistic simulations using the latest technologies. You will master skills in multiplayer and online gaming, AI-driven game behaviour, physics-based environments, and efficient cross-platform programming. Prepare to lead in creating captivating user experiences by combining creativity with robust software engineering techniques. Graduate as a game developer or simulation engineer ready to innovate in entertainment, training, healthcare, and other industries, leveraging interactive digital worlds.



Good to know

Web Engineering

Web development is a mature and multi-faceted field within computer science. This specialisation covers the full spectrum of web development, from crafting seamless and accessible user interfaces to building scalable, secure backend services. Learn to optimize performance, design advanced distributed architectures, implement DevSecOps best practices, and utilize data engineering for intelligent web solutions. Equip yourself with the skills to thrive as a full-stack web engineer, cloud solutions architect, or digital experience innovator in today's fast-evolving tech ecosystem.

Are you ready to influence tomorrow's digital world? Explore the future with FH Salzburg's Master in Code and Interactive Systems.

Perfect for Career Switchers

The programme welcomes professionals from diverse backgrounds. With specialised bridge modules, students can prepare themselves for a transition into multimedia and digital tech fields.

Hubert Hölzl, MSc
Co-founder & CTO atalanda.com, Graduate

»I built my startup atalanda.com, an online marketplace for local merchants, during my studies. The know-how from Scalable Web Architectures helped me in the process. The professional exchange at barcamps and meetups was also particularly helpful.«



Job prospects and career path

Graduates are exceptionally well-prepared for the dynamic demands of the labour market. They can pursue careers in a wide variety of sectors, including software engineering, the web- and online-industry, video game development, digital media and entertainment, research and development.

An attractive option for graduates is launching startups, as FH Salzburg is among Austria's most startup-friendly universities, supporting entrepreneurship during and after studies.



More information
about the programme

Study plan



Ranked number one in the Art Directors Club (ADC) ranking of creative universities

Module	Courses	Semester			
		1	2	3	4
Theory and Research Methods	Data Analysis	3(2)			
	Research Methods & Study Design		3(2)		
Game & Simulation Engineering ¹	Applied Games	4(3)			
	Multiplayer & Online Gaming	4(3)			
	Advanced Gameplay Programming	4(3)			
	Physics-Based Simulation		4(3)		
	Efficient Game Programming		4(3)		
	Software Quality Assurance		1(1)		
	Games User Research		3(2)		
	Artificial Intelligence for Games			4(3)	
	Cross-Platform Development			4(3)	
Guest Lecture Game & Simulation Engineering			2(1)		
Web Engineering ¹	Web Performance Optimisation	4(3)			
	Applied Programming Paradigms	4(3)			
	Distributed Software Architectures	4(3)			
	Continuous Delivery		4(3)		
	Frontend Engineering		4(3)		
	Software Quality Assurance		3(2)		
	Web Performance Optimisation		1(1)		
	Scalable Web Architectures			4(3)	
	Data Engineering			3(2)	
DevSecOps			1,5(1)		
Guest Lecture Web Engineering			1,5(1)		
Project	Lightning Talks & Innovation Workshops	2(2)			
	Digital Ideation / Rapid Prototyping	4(2)			
	Project 1 / Project 2	4(1,5)	9(2)	8(2)	3(1)
	Innovation Coaching & Project Reflection		1(1)	1(1)	0,5(0,5)
	Transfer Projects			1(0)	1(0)
	Lecture Series: Emerging Technologies / Conference Attendance			3(2)	0,5(0,5)
Elective Courses	Information Visualisation & Visual Analytics		3(2)		
	Generative AI		3(2)		
	Predictive Modelling				
	Mixed Reality Technologies				
	Creative Entrepreneur & Corporate Innovation			3(2)	
	Deep Learning & Explainable AI				
Selected Topics in Human-Computer Interaction					
Smart Skills	Agile Project Management	1,5(1)			
	Diversity in Tech	1(1)			
	Facilitation and Efficient Meetings	1,5(1)			
	IT Law and Data Protection		1(1)		
	Symposium on Ethics / Ethics in Informatics	1(1)	1(1)		
	Sustainable Computing			1(1)	
Master Thesis	Master Thesis Seminar			3(2)	1(1)
	Master Thesis / Master Exam				24(0)
ECTS (CHW)		30(20,5)	30(18)	30(17)	30(3)

The curriculum is presented as an overview and may vary in specifics.

ECTS: European Credit Transfer and Accumulation System

CHW: contact hours per week per semester

Lesson times

Monday and Tuesday, the whole day, Friday afternoon (on campus and online lessons)

Saturday mornings on rare occasions

Semester abroad

Possible in the 4th semester

¹Majors

Choose one of the two offered majors from the 1st semester onwards

Electives courses

Choose up to three electives from a wide range of subjects offered by the department

Student projects

portfolio.fh-salzburg.ac.at



Detailed curriculum

Application & Admission

FH-Prof. Dr. Hilmar Linder
Head of Degree Programme

»I see the unique strength of the Master's programme in its balance of technical excellence and creative freedom. Our students don't just learn to master cutting-edge technologies – they apply them in real, interdisciplinary projects that prepare them to lead innovation in different fields. This hands-on, future-oriented approach makes our graduates highly competitive in the international digital industry.«

Study places/year	20 part-time
Degree awarded	Master of Science in Engineering (MSc)
Length of study	4 semesters (120 ECTS)
Study location	Urstein Campus
Language of instruction	English
Tuition	Euro 363 + student union fee per semester
Prerequisites for admission	<ul style="list-style-type: none">· Relevant university degree (bachelor's or diploma degree) from a domestic or foreign institution of higher education or completion of an equivalent course of study at a post-secondary educational institution· Proof of ECTS in the core subject areas required: 20 ECTS credits in STEM subjects (science, technology, engineering, and mathematics) and 25 ECTS credits in the field of software development or equivalent project or work experience· English Level B2
Application procedure	<ol style="list-style-type: none">1. Online Application on our website: www.fh-salzburg.ac.at/online-application2. Interview

Application deadlines and updates can be found at:
www.fh-salzburg.ac.at/cde-master

Urstein Campus



Go to Campus life



Contact

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