INTERACTIVE MEDIA

MASTER'S DEGREE PROGRAMME, FULL-TIME 🇬🇧

Expertise in interactive technologies, computer games and online media

As digital technologies and media continue to permeate more aspects of our everyday lives, the need for intuitive and natural interfaces with integrated, intelligent functionality is becoming even greater. Our Interactive Media programme focuses on preparing graduates for challenging roles in the development of innovative technologies and the production of complex projects in the ever evolving media industry.

The graduate programme features both a broad selection of specialised courses in the field of Interactive Media and a substantial project-based component that enables students to develop their own individual focus. In addition to providing a solid industry-oriented education, the programme seeks to hone students' communication skills and refine their systematic approaches to problem-solving and engineering for interaction.

Career Profile

Graduates of Interactive Media have acquired both the conceptual and design skills necessary for developing innovative media projects and the technical expertise to contribute to their subsequent implementation. Their specific qualifications make them sought-after experts in a variety of fields, including game development, multimedia systems, cooperative workflow solutions, mobile applications, front-end and full-stack web development, content and document management systems, digital asset management and streaming media services. And frequently our graduates serve as catalysts for new digital strategies and technologies in other contexts, such as the automotive industry.

Focus of Studies

The Interactive Media programme is built around an essential core curriculum with three interlocking domains that can be augmented by a selection of elective courses:

» **Interactive Technologies:** Human-computer interaction, physical prototyping, UX design, computer vision, speech processing, collaborative work environments, mixed reality
» **Computer Games:** Game development, game engine architecture, real-time graphics, physics simulation, artificial intelligence, multiplayer and online games, audio systems and processing
» **Online Media:** Web application architecture, semantic web applications, machine learning and web intelligence, natural-language processing and chatbots, distributed and networked systems, e-commerce

Essential Information

Degree:
Master of Science in Engineering (MSc)

Duration:
4 semesters (120 ECTS)

Annual Intake:
24

Admission Requirements:
Completed Bachelor's degree or similar qualification in a relevant subject, with a minimum of 60 ECTS in IT-related subjects; sound knowledge of English.

Application:
Online by 30th June at the latest. Non-EU applicants: send your application by 31st March at the latest – the visa process can take up to 3 months.
www.fh-ooe.at/application

Admission Procedure:
By interview.

Language of Instruction:
English

Semester Abroad:
Flexible curriculum allows students to study at one of our partner universities.

Tuition Fees:
EU/EEA citizens: 363.36 EUR per semester (plus Austrian Student Union fee).
Citizens from non-EU/EEA countries: 726.72 EUR per semester (plus Austrian Student Union fee). Scholarships available.

www.fh-ooe.at/im

Interactive Media technologies are in a constant state of flux. Our graduates meet the demands of these developments by designing and implementing new functionality and enhancing the overall user experience. The ultimate goal of our programme is to provide students with relevant design approaches and hands-on experience that will guide them in their development of the interactive systems of the future.

Dr. Michael Haller, *Programme Coordinator*

Projects and Research

Project opportunities can be explored both in cooperation with leading industry partners or in one of our campus research groups. Our Media Interaction Lab (MIL) is one of Austria's leading research institutions in the field of human-computer interaction. After years of extensive research into virtual reality and tabletop interaction, the lab expanded its focus to include large interactive surfaces, creative environments, and smart textiles, which remains one of its major research areas. These activities are evident in recent projects with automotive companies, as one major goal is to develop and investigate next-generation interfaces for the transportation of tomorrow.

Our research group Playful Interactive Environments (PIE) investigates new and natural forms of playful interaction for various contexts. Its research activities include co-located games, multiuser interaction in mixed reality, hybrid reality games, serious games and expanded animation.

Study Abroad

The Interactive Media progamme is taught in English and its international environment equips students with the language and intercultural skills necessary to succeed in the global media industry. A semester abroad can additionally be spent at one of our partner universities in countries such as Denmark, UK, Sweden, and Norway.

Did you know that …

… our PIE Lab develops games that motivate players to improve their nutrition, think more sustainably and exercise social courage? And that many of our graduates are valued employees at leading technology companies such as Microsoft, Google, and Dynatrace?

Curriculum

Core and elective courses	ECTS credits per semester			
	1	2	3	4
Foundations				
Human-Computer Interaction	4.5			
Artificial Intelligence		4.5		
Systems Design				
Software Design Methods	4.5			
Networked/Distributed Systems		4.5		
Interactive Systems				
Advanced Computer Graphics	6			
Computer Vision		6		
Interactive and Collaborative Environments			4.5	
Real-Time Audio/Video Processing			4.5	
Games Development				
Game Architecture	6			
Game Production		6		
Hypermedia				
Hypermedia Frameworks	6			
Rich Internet Applications		6		
Semantic Text Analysis			4.5	
Special Topics (Examples)				
Special Topic in Game Development			4.5	
Real-Time Audio/Video Processing			4.5	
Speech/Auditory Interfaces			4.5	
Projects and Thesis				
Project	9	9		
Research/Thesis Seminar			2	2
Thesis Project			14.5	6
Master's Thesis				21
Master's Examination				1

Note: Students have to achieve a minimum of 120 ECTS credits in total (30 ECTS credits per semester).
The main language of instruction in this degree programme is English, thus a sound knowledge of the language is required.

Contact

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