

Master Degree Programme Media Informatics

current as of October 1st, 2016

Disclaimer: Note that this is an unauthorized English summary of the curriculum. The official German version is the basis for all study matters and released by the Senate of the University of Vienna.

1 Overview

The master programme media informatics offers a wide range of courses to choose from and allows students to follow their areas of interest. The selection is based on three different fields of expertise:

- computer graphics
- multimedia
- media informatics

Further students can choose between two different application fields:

- Digital Media Production Techniques
- Game Technologies

The master programme media informatics is a 2-year full-time programme with 120 ECTS credits. To be admitted to the master's programme students must have completed an eligible bachelor's programme at a recognised post-secondary educational institution. The master programme is taught in English and requires English knowledge of level B2.

Graduates are awarded the academic degree “*Master of Science*” (MSc).

2 Structure of the Curriculum

The master programme computer science consists of mandatory courses and alternative courses chosen from 3 scientific core areas: computer graphics, multimedia, and media informatics. In the German curriculum, these core areas are called “*Wahlmodulgruppen*” and will be referred to as *clusters* in the English version.

2.1 Structure of a Cluster (“*Wahlmodulgruppe*”)

A cluster constitutes an area of expertise by a set of compliant courses. Each cluster consists of a *gatekeeper* which is a mandatory prerequisite for enrolling for other cluster courses. In the official German curriculum the gatekeeper is listed as the first cluster module with “*Teilnahmevoraussetzung: keine*”, i.e. no prerequisite required. For all other modules the mandatory prerequisites can be found under “*Teilnahmevoraussetzung*” where usually the gatekeeper is listed. For computer science students from the University of Vienna it is very likely that they have already passed some gatekeepers in the Bachelor programme. If you want to select courses from a cluster and the gatekeeper is missing, you have to select the gatekeeper first or show the evidence of competence (“*Nachweis von entsprechenden Vorkenntnissen*”), i.e. you passed an equivalent university course in your bachelor programme.

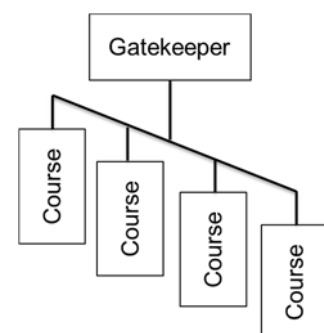


Fig.: Structure of a cluster.

2.2 Course Overview

The curriculum consists of compulsory modules and electives chosen by students according to their preferences:

- (1) Compulsory module foundations (6 ECTS)
 - a. ASE, Advanced Software Engineering, 6 ECTS
- (2) Compulsory modules practical courses (18 ECTS)
 - a. P1, Practical Course 1, 6 ECTS
 - b. P2, Practical Course 2, 12 ECTS
- (3) Compulsory module academic research and writing (6 ECTS)
 - a. MSE, Academic Research and Writing, 6 ECTS
(VU Academic Research and Writing, 3 ECTS and
SE Master's Thesis Seminar, 3 ECTS)
- (4) Cluster Computer Graphics: 1 module, 6 ECTS (54 ECTS)
- (5) Cluster Multimedia: 4 modules with 6 ECTS each (total 24 ECTS)
- (6) Cluster with focus Media Informatics: 2 modules with 6 ECTS each (total 12 ECTS)
- (7) Alternative application fields (18 ECTS)
 - a. Digital Media Production Techniques
or
 - b. Game Technologies
- (8) Master's thesis 30 ECTS
 - a. Thesis, 27 ECTS
 - b. Defensio, 3 ECTS

2.3 Rules for Selecting Electives

Since the master programme offers a wide range of alternative courses, students are required to mail a proposal of their selected courses to the Directorate of Studies (SPL) beforehand (see curriculum paragraph 3a). Please use the forms provided electronically. It is important to keep in mind that it is not allowed to reuse courses which were relevant for admission, e.g. from a Bachelor degree programme, directly (same course has been passed at University of Vienna) or indirectly (an equivalent course has been passed at some post-secondary educational institution).

3 Overview of Clusters (*Wahlmodulgruppen*)

3.1 Computer Graphics
3.2 Multimedia
3.3 Media Informatics

A detailed description of the modules listed below can be found by searching the online course directory using [u:find](#) – just type the name of the module and choose the English page.

3.1 Cluster Computer Graphics

Gatekeeper:

- GFX Foundations of Computer Graphics

Modules:

- CGA Cloud Gaming

- GAT Gaming Technologies
- IMS Image Synthesis
- RCG Real-Time Computer Graphics
- VIS Visualisation and Visual Data Analysis
- AT-GFX Advanced Topics in Computer Graphics

3.2 Cluster Multimedia

Gatekeeper:

- SIP Signal and Image Processing

Modules:

- IPA Image Processing and Image Analysis
- MCM Multimedia Content Management
- MRE Multimedia Representation and Encoding
- MRS Multimedia Retrieval and Content-Based Search
- MST Multimedia and Semantic Technologies
- NTM Network Technologies for Multimedia Applications
- AT-MM Advanced Topics in Multimedia

3.3 Cluster with focus Media Informatics

Gatekeeper:

- DSE Distributed Systems Engineering
- FDA Foundations of Data Analysis

Modules:

- CC Cloud Computing (gatekeeper DSE)
- NLP Natural Language Processing (gatekeeper FDA)

4 Alternative Application Fields

Students can choose between digital media production techniques or game technologies – the modules within an application field are fixed and cannot be replaced by electives.

a. Digital Media Production Techniques (18 ECTS)

Compulsory modules:

- DMP Digital Media Production
- SPP Script Writing: Principals and Practice
- TDF Special Techniques for Digital Film

b. Game Technologies (18 ECTS)

Compulsory modules:

- CGA Cloud Gaming
- GAT Gaming Technologies
- GAD Game Design

5 Master's Thesis and Defensio

The topic of thesis has to be chosen from one of the passed clusters and shall be accomplishable within six months. The Defensio includes an oral presentation of the thesis followed by a discussion of the broad scientific topic and thesis.

Appendix: Recommended schedule.

Recommended Schedule Master Media Informatics

	Module 1	Module 2	Module 3	Module 4	Module 5
1. Semester	Cluster with focus Media Informatics (6 ECTS)	Alternative Application Field (6 ECTS)	Cluster with focus Media Informatics (6 ECTS)	Cluster module Multimedia (6 ECTS)	Cluster module Computer Graphics (6 ECTS)
2. Semester	Advanced Software Engineering (6 ECTS)	Alternative Application Field (6 ECTS)	Cluster module Multimedia (6 ECTS)	Cluster module Multimedia (6 ECTS)	Practical Course 1 (6 ECTS)
3. Semester	Academic Research and Writing (3 ECTS)	Master's Thesis	Alternative Application Field (6 ECTS)	Cluster module Multimedia (6 ECTS)	Practical Course 2 (12 ECTS)
4. Semester	Master's Thesis Seminar (3 ECTS)		Master's Thesis (30 ECTS)		