

## **University of Tübingen exam regulations for the study program in Medieninformatik/Media Informatics culminating in an examination for a Master of Science (M. Sc.) – Special Provisions –**

In accordance with §§ 19 paragraph (1) sentence 2 nos. 7 and 9, 32 paragraph (3) of the law governing institutions of higher education, LHG of 1 January 2005 (GBl. p. 1), in the version published 1 April 2014 (GBl. p. 99) most recently amended by article 1 of the law dated 24 June 2020 (GBl. p. 426), the University of Tübingen Senate on 11.03.2021 passed the Special Provisions of these exam regulations for the study program in Medieninformatik/Media Informatics at the University of Tübingen culminating in an examination for a Master of Science (M. Sc.) degree.

Approved by the President and Vice-Chancellor on 25.03.2021.

### Contents

- A. Validity of General Provisions and admission requirements
  - § 1 Validity of General Provisions
  - § 2 Requirements for admission to program
- B. Goals, content and structure of the program
  - § 3 Goals and contents of program, regular duration of study, scope of program
  - § 4 Academic degree
  - § 5 Program Structure
  - § 6 Module coursework
  - § 7 Languages of instruction and examination
- C. Assessment in the program
  - I. General Provisions for assessed coursework
    - § 8 Related degree programs
    - § 9 Multiple-choice procedure
  - II. Special provisions for the final module
    - § 10 Final module
    - § 11 Subject-specific requirements for admission
    - § 12 Repetition for a better grade
- D. Deadlines for examinations in the program
  - § 13 Deadlines for completion of module coursework
  - § 14 Deadline for completion of studies
  - § 15 Student counselling
- E. Master's overall grade
  - § 16 Calculation of Overall Grade
- F. Closing remarks
  - § 17 Effective date and transitional arrangements

### **A. Validity of General Provisions and admission requirements**

#### **§ 1 Validity of General Provisions**

The University of Tübingen exam regulations for Master's degree programs culminating in the academic degree of Master of Science (M.Sc.) / Master of Arts (M.A.) – Master's degree framework exam regulations (MRPO) – as amended represent the General Provisions of these exam regulations and are an integral part of them, insofar as no more specific provisions have been made.

#### **§ 2 Requirements for admission to program**

- (1) <sup>1</sup>A prerequisite for studies in this Master's program is a grade of "good" (2.5 or better) in a Bachelor's degree in the subject of Media Informatics, in a related program covering basically the same material, or an equivalent degree.<sup>2</sup>The responsible examination board decides on the

equivalency of a degree. <sup>3</sup>The board may transfer this decision revocably to the head of the board. <sup>4</sup>If there is a restricted number for admission, the articles may specify that the selection committee formed for the relevant selection process decides instead.

- (2) <sup>1</sup>To take part in the Master's program, applicants must also document knowledge of English at least at the level of C1/B2 of the Common European Framework of Reference for Languages (CEFR).

## **B. Goals, content and structure of the program**

### **§ 3 Goals and contents of program, regular duration of study, scope of program**

(1) <sup>1</sup>Studies in Master of Science program (M. Sc.) in Medieninformatik/Media Informatics (hereinafter: the program) enable students to acquire the specific qualifications, competencies, knowledge, abilities and skills required for a Master's degree in the subject of Media Informatics under § 7 (1) of the Master's degree framework exam regulations. <sup>2</sup>The objective of the degree program is to deepen or expand the knowledge acquired in the Bachelor's degree program, thus providing the basis for the development and/or application of the student's own ideas (application or research-oriented); graduates possess a broad, detailed and critical understanding at the cutting edge of knowledge in one or more specialized fields and

- are able to apply their knowledge and understanding as well as their problem-solving skills in new and unfamiliar situations related to their field of study in a wider or multidisciplinary context (instrumental competencies),
- to integrate knowledge and deal with complexity,
- and to make scientifically sound decisions on the basis of incomplete or limited information, taking into account social, scientific and ethical findings resulting from the application of their knowledge and from their decisions,
- to acquire new knowledge and skills independently and to carry out largely self-directed and/or autonomous independent research- or application-oriented projects (systemic competencies)
- to communicate their conclusions and the information and motives underlying them to expert representatives and laypersons in a clear and unambiguous manner, to exchange information, ideas, problems and solutions with both experts and laypersons on a scientific level and to assume prominent responsibility in a team (communicative competencies).

<sup>3</sup>Further details of the course objectives are set out in the module handbook.

(2) <sup>1</sup>The regular duration of study for this degree program is 4 semesters. <sup>2</sup>The program comprises 120 credit points ( CP).

(3) <sup>1</sup>Over and above the number of credit points prescribed for the degree program according to these regulations, students may obtain no more than a 30 additional credit points from the degree program modules specified in § 5, para. (1); in all other respects, § 2, paras. (4) and (5) of the Master's degree framework exam regulations apply.

### **§ 4 Academic degree**

The academic degree "Master of Science" (abbr. "M.Sc.") is awarded on the basis of a successful completion of the program.

### **§ 5 Program Structure**

(1) <sup>1</sup>Students complete a program to earn credit points as set out in § 3 para. (2); the program consists of the following modules:

This is a courtesy translation for your convenience only. The sole legally-binding document is the Studien- und Prüfungsordnung der Universität Tübingen für den Studiengang Medieninformatik/Media Informatics mit akademischer Abschlussprüfung Master of Science (M. Sc.) (bis Wintersemester 2021/22 Bezeichnung des Studiengangs Medieninformatik mit akademischer Abschlussprüfung Master of Science (M.Sc.)) – Besonderer Teil –

Semester no.	Module no.	P/WP	Module description	Work for assessment	CP
Study area Human-Computer-Interaction(MEDI-HCI) with a workload of 6 ECTS <sub>1</sub> ) The following modules may be selected:					
1-3	INFO-4178	WP	Displays	mP	6
1-3	INFO-4380	WP	Eye-Based Human-Computer-Interaction	K or mP	6
1-3	MEDI-4410	WP	Multimodal Human-Machine Interaction	K or mP	6
1-3	according to module handbook	WP	Seminars, module title according to module handbook	H, R	3
Study area Web Programming and Internet (MEDI-WEB) with a workload of 6 ECTS <sub>1</sub> ) The following modules may be selected:					
1-3	MEDI-4320	WP	Advanced Media Applications	as	6
1-3	MEDI-4310	WP	Advanced Web Development	K or mP	6
1-3	according to module handbook	WP	Seminars, module title according to module handbook	H, R	3
Study area Computer Graphics und Visual Computing (MEDI-VIS) with a workload of 12 ECTS <sub>1</sub> ) The following modules may be selected:					
1-3	INFO-4162	WP	Image Processing II (3D computer vision)	K or mP	6
1-3	INFO-4167	WP	Computer Graphics	K	6
1-3	according to module handbook	WP	Seminars, module title according to module handbook	H, R	3
Study area Multimedia Technologies (MEDI-MMT) with a workload of 6 ECTS <sub>1</sub> ) The following modules may be selected:					
1-3	INFO-4157	WP	Advanced Image Synthesis	see details in module handbook	6
1-3	INFO-4177	WP	Intelligent Systems II	K or mP	6
1-3	according to module handbook	WP	Seminars, module title according to module handbook	H, R	3
Study area Media Informatics (MEDI-MEDI) with a workload of 12 ECTS <sub>1, 2</sub> ) The following modules may be selected:					
1-3	INFO-4175	WP	Rendering	K or mP	6
1-3	INFO-4176	WP	Computational Photography	K or mP	6
1-3	INFO-4351	WP	Parallel Computer Architectures	K or mP	6
1-3	according to module handbook	WP	Seminars, module title according to module handbook	H, R	3
Study area Practical Media Informatics and Media Production (MEDI-PRAX) with a workload of 12 ECTS <sub>1</sub> ) The following modules may be selected:					
1-3	MEDI-4510	WP	Audiovisual Media I (Video cutting and camera technique)	see details in module handbook	3
1-3	MEDI-4511	WP	Audiovisual Media II (3D animation)	see details in module handbook	3

This is a courtesy translation for your convenience only. The sole legally-binding document is the Studien- und Prüfungsordnung der Universität Tübingen für den Studiengang Medieninformatik/Media Informatics mit akademischer Abschlussprüfung Master of Science (M. Sc.) (bis Wintersemester 2021/22 Bezeichnung des Studiengangs Medieninformatik mit akademischer Abschlussprüfung Master of Science (M.Sc.)) – Besonderer Teil –

1-3	MEDI-4512	WP	Audiovisual Media III (Special Effects)	see details in module handbook	3
1-3	MEDI-4599	WP	Special Chapters of Media Production	see details in module handbook	3
1-3	MEDI-4998	WP	Research Project <sup>3)</sup>	H,R	9
Study area Informatics and Media Informatics (MEDI-INFO) with a workload of 18 ECTS <sup>1)</sup> , 4) The following modules may be selected:					
1-3	INFO-4183	WP	Evolutionary Algorithms	K or mP	6
1-3	INFO-4185	WP	Basics of Machine Learning	K or mP	6
1-3	INFO-4412	WP	Algorithms and Complexity	K or mP	6
Study area In-depth and application subjects (MEDI-APPL) with a workload of 18 ECTS <sup>1), 5)</sup> The following modules may be selected:					
1-3	INFO-4351	WP	Parallel Computer Architectures	K or mP	6
1-3	INFO-4241	WP	Programming Languages II	K or mP	6
1-3	INFO-4361	WP	Mobile Robots	K	6
Study area Master's Thesis (MASTER)					
4	MEDI-4999	P	Master's thesis (final module)*	Master's thesis, R	30
Total					120

1) A maximum of three seminars may be selected in the program.

2) Students must select modules to make up the required total of ECTS credits. The modules given in the table above may be selected (subject to when each module is currently on offer). Further modules may be set out in the module handbook. If such elective options exist, students must make use of them so that the required number of credit points is reached in each study area or sub-area, unless the board of examiners approves a differing points schedule. A student may only select a module from a study area if he/she has not already selected that module in another study area.

3) At least one seminar in the MEDI-MEDI study area must be selected.

4) A maximum of one research project (either module MEDI-4998 or module INFO-4998) may be selected in this program.

FS = recommended semester (subject to availability and change, see module handbook); module no. = current module no. or abbreviation (subject to change, see module handbook), P = compulsory, WP = required elective, CP = credit points, K = written exam, H = assignment; mP = oral defense; R = class presentation; \*Master's project (final module): Master's thesis and accompanying final colloquium on the contents of the Master's thesis.

## § 6 Module coursework

<sup>1</sup>Details of the module coursework required in each of the modules is set out in the module table in these regulations (§ 5) and in the module handbook. <sup>2</sup>Assessment must be clearly specified as to its type and scope, if this is not set out in the module table. <sup>3</sup>For the imported modules, students may be directed to the module handbook of the respective department with which the modules originate.

## § 7 Languages of instruction and examination

<sup>1</sup>German and English are the languages of instruction and examination in this degree program.

<sup>2</sup>Classes and module coursework may be conducted, promoted and taught in the following languages:

This is a courtesy translation for your convenience only. The sole legally-binding document is the Studien- und Prüfungsordnung der Universität Tübingen für den Studiengang Medieninformatik/Media Informatics mit akademischer Abschlussprüfung Master of Science (M. Sc.) (bis Wintersemester 2021/22 Bezeichnung des Studiengangs Medieninformatik mit akademischer Abschlussprüfung Master of Science (M.Sc.)) – Besonderer Teil –

- English;
- German.

<sup>3</sup>Furthermore, teachers and examiners may promote and/or conduct classes and/or module coursework in another language for the purpose of teaching that language. <sup>4</sup>Exams are usually conducted in the language in which the relevant classes were held; other assessment is usually conducted in the language in which the relevant classes were held. <sup>5</sup>It is therefore assumed that students have sufficient knowledge of the relevant languages.

## **C. Assessment in the program**

### **I. General Provisions for assessed coursework**

#### **§ 8 Related degree programs**

(1) Related programs with basically the same content as defined in § 17 paragraph (2) sentence 2 of the MRPO are:

- M.Sc. Bioinformatik / Bioinformatics
- M.Sc. Informatics
- M.Sc. Medizininformatik / Medical Informatics
- M.Sc. Cognition Science

(2) The examination board responsible for the degree program shall decide on other related programs with basically the same content.

#### **§ 9 Multiple-choice procedure**

(1) <sup>1</sup>Written assessment in the form of examinations may, in the following cases, be wholly or partly conducted in such a way that the candidate must indicate which of the answers - presented with the examination questions - he or she considers to be correct (multiple-choice procedure). <sup>2</sup>The conditions for the conducting of examinations including multiple-choice questions are:

- the examination tasks are set by the person or persons acting as the examiner, and
- the examinations, after they have been completed, are corrected in their entirety by the person or persons acting as examiners, and
- the examinations are graded by the person or persons acting as examiners according to their respective individual grading scheme according to § 19 MRPO.

<sup>3</sup>Prior to the correction of the examinations, no determination may be made regarding certain assessments, such as the setting of certain grades if a certain proportion of the examination questions are answered correctly or if a certain number of points is achieved.

(2) Regarding assessment conducted via online attendance in accordance with § 12 MRPO, para. (1) applies accordingly.

### **II. Special provisions for the final module**

#### **§ 10 Final module**

(3) <sup>1</sup>In the final module, 30 credit points must be obtained. <sup>2</sup>Of these, 27 CP are obtained in the Master's thesis and 3 CP in the oral examination in the final module [this takes the form of a final colloquium as part of the Master's thesis process (3 CP)]. <sup>3</sup>The Master's thesis and the oral examination in the final module are regulated by § 28 MRPO.

(4) The time limit for writing a Master's thesis - from the issuing of the topic to submission of the

This is a courtesy translation for your convenience only. The sole legally-binding document is the Studien- und Prüfungsordnung der Universität Tübingen für den Studiengang Medieninformatik/Media Informatics mit akademischer Abschlussprüfung Master of Science (M. Sc.) (bis Wintersemester 2021/22 Bezeichnung des Studiengangs Medieninformatik mit akademischer Abschlussprüfung Master of Science (M.Sc.)) – Besonderer Teil –

thesis - is six months.

(5) <sup>2</sup>The oral exam in the final module under para. (1) is assessed by one examiner and takes place without the additional presence of an observer; for grading, § 19 MRPO applies.

## **§ 11 Subject-specific requirements for admission**

In addition to the prerequisites set out in the MRPO, the subject-related prerequisites for admission to the Master's thesis and the oral exam in the final module are:

- the successful completion of modules worth a total of at least 45 ECTS credits.

## **§ 12 Repetition for a better grade**

Assessment resulting in a pass may not be repeated.

## **D. Deadlines for examinations in the program**

### **§ 13 Deadlines for completion of module coursework**

Deadlines for the completion of coursework or module-specific assessment are not currently provided for.

### **§ 14 Deadline for completion of studies**

<sup>1</sup>All coursework and assessment required under the exam regulations for the module coursework must be completed by the end of the student's 7th semester in the subject. <sup>2</sup>If this time limit is exceeded, the student's right to be examined is lost, unless the failure to meet the deadline is beyond the control of the student.

### **§ 15 Student counselling**

In order to ensure academic success within the limits of the law, students may be called for an interview by the appropriate academic advisor if the following CP have not been achieved:

- by the end of the 2nd subject-specific semester: 40 CP.

## **E. Master's overall grade**

### **§ 16 Calculation of Overall Grade**

<sup>1</sup>The overall grade for the Master's examination process is calculated from the average of all graded modules, as weighted by credit points. <sup>2</sup>Notwithstanding § 19 (3) sentence 3 MRPO, calculation takes into account whole numbers and the first two decimal places only; all further decimal places are deleted with no rounding.

## **F. Closing remarks**

### **§ 17 Effective date and transitional arrangements**

<sup>1</sup>These exam regulations come into effect on the date of their publication in the University of Tübingen's official bulletin, the Amtliche Bekanntmachungen. <sup>2</sup>Their first semester of validity is the winter semester 2021/22. <sup>3</sup>Students who commenced their studies in this program at the University of Tübingen prior to the semester specified in sentence 2 are - subject to the following provisions - entitled to complete their module coursework in this degree program at the University of Tübingen

This is a courtesy translation for your convenience only. The sole legally-binding document is the Studien- und Prüfungsordnung der Universität Tübingen für den Studiengang Medieninformatik/Media Informatics mit akademischer Abschlussprüfung Master of Science (M. Sc.) (bis Wintersemester 2021/22 Bezeichnung des Studiengangs Medieninformatik mit akademischer Abschlussprüfung Master of Science (M.Sc.)) – Besonderer Teil –

by 30.09.2024 under the previously valid rules; however, regarding the examination board, § 6 MRPO applies. <sup>4</sup>Students who commenced their studies in this program at the University of Tübingen prior to the semester specified in sentence 2, are entitled to switch and complete their module coursework in the degree program under these current exam regulations upon written application, which must be submitted to the responsible examination office by 30.09.2022. <sup>5</sup>If no application under sentence 4 above is lodged, then - after the deadline specified in sentence 3 - the module coursework in the degree program must be completed under these current regulations. <sup>6</sup>Module coursework completed previously will only be accredited according to the new exam regulations and the corresponding module handbook, subject to the following provisions. <sup>7</sup>These exam regulations do not grant any new or additional right to be assessed in an area already assessed; any fails in assessed work under the previous exam regulations will be included. <sup>8</sup>Furthermore the responsible board of examiners may agree suitable transitional arrangements in individual cases, particularly if previous classes are no longer offered as before or if certain classes have been completed, possibly offering partial accreditation and/or requiring certain conditions to be fulfilled, particularly if a "learning agreement" is to be considered.

Tübingen, 25.03.2021

Professor Dr. Bernd Engler  
President