

Study Regulations Governing the Master's Degree Programme in Media Informatics at Saarland University

30 April 2020

Note: This translation is provided for information purposes only. In the event of any discrepancy between the translation and the original German version published in the Official Bulletin (*Dienstblatt der Hochschulen des Saarlandes*), the provisions of the latter shall take precedence.

Pursuant to Section 60 of the Saarland Higher Education Institutions Act (SHSG) of 30 November 2016 (Official Gazette of Saarland I, p. 1080) as amended by the Act of 10 April 2019 (Official Gazette I, p. 412) and pursuant to the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 July 2015 (Official Bulletin, p. 616) as amended by the Ordinance to Amend the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 28 April 2016 (Official Bulletin, p. 404) and with the consent of the Saarland University Senate, the Faculty of Mathematics and Computer Science at Saarland University hereby issues the following Study Regulations for the Master's Degree Programme in Media Informatics.

Section 1 Scope

These study regulations, which govern the content and structure of the Master's degree programme in Media Informatics, are based on the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 July 2015 (Official Bulletin, p. 616) as amended by the Ordinance to Amend the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 28 April 2016 (Official Bulletin, p. 404) and on the Subject-Specific Regulations Governing the Bachelor's and the Master's Degree Programme in Media Informatics at Saarland University Supplementing the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 June 2016 (Official Bulletin, p. 620). The Faculty of Mathematics and Computer Science is responsible for organizing the teaching, study curriculum and examinations associated with this programme.

Section 2 Objectives of the degree programme and career relevance

(1) The Master's degree programme 'Media Informatics' aims to provide an applications-driven education in the multidisciplinary field of media informatics by including integrated practical skills training, work placements / internships and project work that place particular importance on developing an interdisciplinary approach to systems design. The programme not only teaches students the methods and techniques used in scientific research as well as a deeper understanding of the subject's underlying principles, it also enables them to acquire a professionally relevant and applications-focused skills set. Students are taught how to design, analyse and evaluate the technologies used in the media IT sector. Through a cooperative arrangement with Saarland's University of Art and Design (HBKsaar), students also participate

in project-based teaching units where they can train important design skills. Students undertake practical skills classes and a work placement / internship stage that help them develop group-work and interpersonal skills and to consolidate the theoretical knowledge acquired in the programme by applying it to practical projects. Graduates from the Master's programme are qualified to take up management posts in organizations that develop and integrate new means of interacting with digital media. Employment opportunities for graduates include lead supervisory roles and freelance work researching, designing and developing intelligent methods of man-machine interaction, providing technology consulting and coordination services to companies, incorporating new media into projects in the media sector, and developing novel edutainment and entertainment concepts.

(2) The academic training that students receive on the M.Sc. programme 'Media Informatics' also provides a sound foundation for further postgraduate study (e.g. doctoral or PhD research).

Section 3 **Start and duration of programme**

(1) Students can begin the programme at the beginning of the winter or summer semester of each year.

(2) The curriculum is organized such that the programme can be completed in four semesters (standard period of study).

Section 4 **Types of academic instruction**

The curriculum content is taught using the following types of academic instruction:

1. Lectures ('L', standard class size = 100): Lectures serve to introduce a particular subject area and also provide an overview of the relevant theoretical concepts and principles, methodologies and skills, technologies and practical implementations that are common to the subject. Lecture courses provide suggestions for further reading on a topic and open the way to acquiring a deeper understanding of an area through subsequent exercise and problem-solving classes, practical skills classes and self-directed study.
2. Exercise and problem-solving classes ('EP', standard class size = 20): Exercise and problem-solving classes are small-group sessions used primarily to supplement and reinforce what was learned in the lectures. Students work on representative problems as this provides an opportunity for them to apply and deepen the knowledge they acquired in the lectures, to assess their personal understanding of a specific area and to clarify any questions that they may have.
3. Seminars ('S', standard class size = 15): Seminars provide an opportunity for students to broaden the knowledge and skills that they have already acquired and to gain a deeper understanding of a particular field of research by participating in discussions, giving presentations or completing seminar papers, based on their study of the specialist literature and relevant academic sources. They also help students acquire the skills necessary for the effective oral and visual presentation of scientific and academic content and encourage students to engage in critical analysis and discussion of research results. A seminar may also include project-related work in areas of current scientific interest or debate. The deeper understanding of a particular field that students acquire through project-related work in the Master's seminar may provide the basis for their final-year

Master's thesis.

4. Practical skills classes and project work ('P', standard class size = 15; Master's level practical assignment or project, standard class size = 6): Practical skills classes or projects offer a number of practical, subject-related topics that introduce students to the specific approaches and methods used in a particular discipline or field of study. The necessary theoretical knowledge underlying a specific topic is acquired by attending lectures and studying the relevant scientific literature. An additional goal of the practical skills classes is to provide students with the opportunity to gain practical experience with computer-aided methods. Projects tend to address interdisciplinary topics. Working on a topic offers students the opportunity to work in supervised groups to tackle specific assignments from the initial solution design concept through to its final practical implementation. Students learn about the relationships between theory and practice not only through their own independent study and research, but also through project-based teamwork. Participation in a particular practical skills class or project may be dependent on a student having first successfully completed a required course of lectures and exercise and problem-solving classes.

Section 5

Structure and content of the programme

(1) To graduate from the Master's programme 'Media Informatics', students are required to earn a total of 120 credits (often referred to in Germany as 'credit points' or 'CPs') as defined by the European Credit Transfer System (ECTS). As a rule, students are required to earn 30 credits per semester.

(2) The degree programme comprises modules from different module categories. Appendix A provides details of the modules and module elements in each of these categories, the type of academic instruction used, the associated workload (number of credit hours per week), the ECTS credits earned, the type of academic assessment and whether the module is graded. Students are required to earn the specified number of credits in each of the module categories. The 'mandatory elective' category comprises modules or module elements that a student can select from a specified list.

1. 18 graded credits from the core lecture courses in computer science (each worth 9 credits; module category: mandatory elective)
2. At least 6 and at most 9 graded credits from the advanced lecture courses in computer science (number of credits earned depends on course; module category: mandatory elective)
3. 7 graded credits from seminars on topics in 'media informatics or computer science (each worth 7 credits; module category: mandatory elective)
4. 16 credits from modules offered by HBKsaar – University of Art and Design Saar:
 - a) 8 credits from the 'Media, Art and Design (MAD)' project (graded; module category: mandatory)
 - b) 8 credits from modules offered by HBKsaar (each worth 4 credits) or an additional MAD project (worth 8 credits) (ungraded; module category: mandatory elective)
5. 25 credits from the work placement / internship stage (cf. Section 6):

- a) 20 ungraded credits from the work placement / internship and
 - b) 5 graded credits from the associated work experience seminar
6. At least 6 ungraded credits from freely selectable modules (module category: mandatory elective), which can be chosen from the following options:
- a) Freely selectable modules from the Master's programme in Media Informatics
 - b) Master's level practical assignments or projects (each worth 6 credits)
 - c) Tutoring and supervising undergraduate students in exercise and problem-solving classes (usually 4 credits). Tutoring several groups of students is permitted, provided that the exercise and problem-solving classes are from different modules.
 - d) Language courses (maximum of 6 credits; modern languages only and not the student's native language).
 - e) Approved modules / module elements offered by HBKsaar - University of Art and Design Saar
 - f) Modules/ module elements for which an application was submitted to and approved by the Examination Board. Students may, for example, submit an application to the Examination Board requesting recognition of certain student activities (particularly university-related administrative activities) or of attendance at courses teaching key skills (maximum of 3 credits in each case).
7. 12 graded credits from the Master's seminar on topics in media informatics or computer science / informatics and
30 graded credits for a Master's thesis in the field of media informatics or computer science / informatics

(3) Of the 120 credits that have to be earned in the Master's degree programme in Media Informatics, at least 86 credits and at most 89 credits shall be from graded assessments or assignments.

(4) To fulfil the requirements of the mandatory section of the programme curriculum, students shall complete all of the modules specified in Section 5(2), item 4a and item 7 above (total number of credits earned: 50). In the mandatory elective section of the programme curriculum, students can take modules or module elements from a specified list, provided that they meet the relevant prerequisites stipulated for the particular module or module element selected. Students shall earn a total of 70 credits from modules in the mandatory elective category, of which 25 credits shall be from the work placement / internship stage. Credits from academic assessments and examinations that were used to obtain a Bachelor's degree cannot also be used to meet the degree requirements of the Master's programme. However, any credits from academic assessments and examinations that were earned during the Bachelor's degree period but that were not used to meet the total credit requirements for the Bachelor's programme may be transferred to the Master's programme provided that they do not exceed 30 credits in total.

(5) The number of places available in practical skills classes, seminars, tutoring activities, language courses and in the modules offered by the University of Art and Design Saar (HBKsaar) are limited. In certain exceptional cases and where reasonable grounds exist, limits may be placed on the number of places available on modules in other sections of the programme curriculum. Admission to these modules is managed by the module coordinator.

(6) Academic credits are either graded or ungraded. A graded academic assessment or examination cannot be split into ungraded and graded credits.

(7) A student who received academic credits for successfully completing a core lecture course is permitted to retake the assessment or examination on one further occasion within the same examination period and during the standard period of study in order to improve the mark awarded (cf. Sec. 13(4) of the Examination Regulations). A student who has received academic credits for successfully completing an advanced lecture course is permitted to retake the assessment or examination on one further occasion within the same examination period in order to improve the mark awarded, provided that the lecturer gave notice at the beginning of the course that the final examination or assessment may be repeated for this purpose. The student will be awarded the better of the two grades achieved. In all other cases, students are not permitted to repeat an assessment or examination for which they have already achieved at least the minimum passing grade.

(8) The core lecture courses in the mandatory electives section of the programme are offered at least once every two years. Seminars and advanced lecture courses will not necessarily be repeated. The Dean of Studies shall ensure that a sufficient number of modules are offered each academic year.

(9) The language of instruction is usually English and will be announced at the beginning of each module or module element.

(10) The range of modules offered as mandatory electives may be modified for one or more semesters, though such a change shall require the approval of the Examination Board. These additional modules or module elements, their weighting in ECTS credits and their classification within the different sections of the programme curriculum will be announced before the semester begins.

(11) Detailed information regarding the content of modules and module elements is provided in the module catalogue that will be made available in suitable form. Any changes or amendments to the information in the module catalogue that are not covered by the provisions of these regulations shall be reported to the Dean of Studies and documented appropriately.

(12) Course attendance may be compulsory for certain seminars, exercise or problem-solving classes and practical skills classes. Students will be notified of this by the instructor at the beginning of the module or module element. The mandatory attendance requirement is normally deemed to have been met if a student was present for at least 85% of the course sessions. If there are reasonable grounds for a student's absence, the student may be offered the option of completing an alternative assignment.

Section 6

Work placement / internship stage

(1) Students on the Master's degree programme 'Media Informatics' are required to complete a work placement / internship stage comprising the work placement / internship itself and an associated work experience seminar. A work placement / internship may only be undertaken if the relevant details have been previously discussed and approved by the programme adviser or the Examination Board. The work placement / internship is a period of practical training and instruction in the field of media informatics or a related area, such as computer science, that is undertaken by the student in an industrial or research environment. Whenever possible, the work placement / internship stage should be undertaken in the second semester. Students who complete the work placement / internship shall earn 20 ungraded credits. The total student workload is 600 hours (1 credit earned for every 30 hours worked). No additional credits will be awarded if the workload exceeds the specified number of hours. The work placement / internship should be undertaken in a company, organization or research institution that is active in a field of relevance to media informatics. Placements can also be undertaken abroad. The

company, organization or research institution hosting the work placement / internship shall provide an ungraded certificate confirming that the student completed the total workload of 600 hours.

The work placement / internship stage includes a work experience seminar where students compile a report on their work placement or internship and a colloquium in which they document their work experience. Students receive 5 graded credits for successfully completing the work experience seminar.

(2) The Examination Board shall, on request, take account of statutory periods of maternal leave, periods of parental leave and family care obligations (particularly caring for a child under the age of 18 or supporting family members with care needs), as well as the special needs of students with disabilities.

(3) The Faculty of Mathematics and Computer Science shall appoint an authorized person to administer the work placement / internship stage of the programme.

(4) Students shall attend an advisory session that provides information on the implementation and organization of the work placement / internship. Students will be supervised during the work placement / internship by a member of the department or by a supervisor as defined in Section 8 of the examination regulations. Each student is personally responsible for arranging their own work placement / internship and for obtaining prior approval for the proposed work placement / internship from the Examination Board or its Chair. Assistance during the application phase, and information on work placement / internship opportunities, scholarships and administrative formalities (particularly in the case of work placements / internships abroad) is available from Saarland University's Business and Industry Liaison Office, the Student Advisory Service at the Department of Computer Science and from the Saarland University's International Office.

(5) Students are required to submit to the 'Media Informatics' Examination Board the subject area and content of their proposed work placement / internship and details of the host company/organization. The Examination Board must approve the proposal.

(6) The work placement / internship shall be assessed:

1. formally by the person authorized by the Faculty of Mathematics and Computer Science to administer the work placement / internship stage of the programme
2. in a colloquium by means of a student report that documents the work carried out during the work placement / internship. The report should be submitted immediately after completion of the work placement / internship but no later than the end of the following semester; the colloquium shall be held as part of the work experience seminar. Students who successfully complete the colloquium shall be awarded 5 graded credits.

Section 7

Study plan

The Dean of Studies shall compile a study plan based on these study regulations that includes details of the types and scope of the modules / module elements offered (Appendix A) with recommendations on how students can organize and structure their studies efficiently (Appendix B). The study plan will be made available in suitable form. The range of modules / module elements offered in a particular semester will be published in the Saarland University course catalogue for that semester.

Section 8

Study counselling

(1) The Central Student Advisory Service (*Zentrale Studienberatung*) at Saarland University provides counselling and guidance to prospective students and enrolled students concerning the content, structure and requirements of academic study at Saarland University. It also can advise and assist students with respect to their study options as well as with planning and organizing their studies.

(2) Questions concerning curricular demands, learning objectives, admission requirements and study planning and organization can be addressed to the programme adviser for the M.Sc. Programme in Media Informatics.

(3) Questions specific to individual modules / module elements should be addressed to the respective module coordinators.

Section 9

Studying abroad

Students have the opportunity to spend part of the programme studying abroad. Students interested in studying abroad should attend a study-abroad consultation session, take preparatory language courses if required, and should clarify credit transfer arrangements in accordance with the relevant examination regulations by completing a study abroad learning agreement. Information on study abroad opportunities, exchange programmes, scholarships and administrative formalities is available from the Saarland University International Office or from the relevant departmental or subject representatives. As foreign host universities and scholarship-awarding bodies often have early application deadlines and long application processing times, study abroad applications should normally be submitted to the Examinations Office one year before the planned start date.

Section 10

Master's thesis and Master's seminar

(1) By completing a Master's thesis, students demonstrate that they are able to work independently on addressing a technical, design and/or theoretical-conceptual problem in the field of media informatics or related areas. The completion period for the Master's thesis is six months. Students are awarded 30 credits for completing their Master's thesis.

(2) Before finishing their Master's thesis, each student shall have successfully completed a Master's seminar in an area with direct relevance to the topic being addressed in the thesis. Students attending a Master's seminar shall give an oral presentation on the problem they propose to tackle in their Master's thesis and submit a written description of the issues to be addressed.

(3) Students shall register their thesis project with the Examinations Office no later than one semester after successfully completing the Master's seminar. Students who fail to meet this deadline will be required to successfully complete another Master's seminar.

Section 11

Commencement

(1) This regulation shall come into force on the day after it is announced in the Official Bulletin of the Institutions of Higher Education in Saarland (*Dienstblatt der Hochschulen des Saarlandes*).

(2) Students who began studying for the Master's programme in Media Informatics at the Faculty of Mathematics and Computer Science before these regulations entered into force may continue to study under the study regulations applicable at the time they began the Master's programme but are required to complete their studies including the final academic assessment and examination phase by the end of winter semester 2022/2023.

Saarbrücken, 9 April 2021

President of Saarland University
(Univ.-Prof. Dr. Manfred Schmitt)

Appendix A. Modules, assessments and examinations in the Master's degree programme 'Media Informatics'

Master's degree programme (M.Sc.) Media Informatics

		Winter semester		Summer semester		Winter semester		Summer semester				
Module category / Modules	Type of assessment	graded/ungraded	ECTS credits		Subject semester							
			ungraded	graded	1		2		3		4	
					L / EP / P hrs/wk	credits	L / EP / P hrs/wk	credits	L / EP / P hrs/wk	credits	L / EP / P hrs/wk	credits
Core lecture courses (module category: mandatory elective)												
(Core lecture courses; 9 credits per course, see list below)	written exam(s), PA	g	0	18	4/2/0	9						
Advanced lecture courses* (module category: mandatory elective)												
(variable credits, see list below)	written exam(s), PA	g	0	6 - 9			2/2/0	6				
Seminars* (module category: mandatory elective)												
	oral, written	g	0	7	0/0/3	7						
Modules offered by HBKsaar – University of Art and Design Saar												
Media, Art and Design (MAD) project (Modules offered by HBKsaar; 4 credits per module, see list below)	Project work	g	0	8			0/0/7	8				
	Project work	u	8	0	0/2/0 0/2/0	4 4						
Work placement / internship stage												
Work Placement / Internship	Project work	u	20	0			0/0/15	20				
Work Experience Seminar	oral, written	g	0	5			0/0/2	5				
Freely selectable modules (module category: mandatory elective)												
(modules offered subject to change, variable credits, see list below)		u	at least 6	0					6			
Master's seminar												
	oral, written	g	0	12					12			
Master's thesis												
	Master's thesis	g	0	30						30		
TOTAL			at least 34	at least 86		33		25	32	30		

* The range of modules offered in these module categories varies from semester to semester and is published in the course catalogue. The Examination Board may add modules to or withdraw modules from this list.
Key: L = Lecture, EP = Exercise and problem-solving class, P = Project or practical training, PA = Preliminary assessment, credits = ECTS credits, credit hrs/wk = no. of class or supervised hours per week during the semester

Core lecture courses

(The Examination Board may add modules to or withdraw modules from this list.)

Modules	Type of assessment	Graded/Ungraded	ECTS credits
Algorithms and Data Structures	written exam(s), PA	g	9
Artificial Intelligence	written exam(s), PA	g	9
Automated Reasoning	written exam(s), PA	g	9
Compiler Construction	written exam(s), PA	g	9
Complexity Theory	written exam(s), PA	g	9
Computer Algebra	written exam(s), PA	g	9
Computer Graphics	written exam(s), PA	g	9
Cryptography	written exam(s), PA	g	9
Database Systems	written exam(s), PA	g	9
Data Networks	written exam(s), PA	g	9
Distributed Systems	written exam(s), PA	g	9
Embedded Systems	written exam(s), PA	g	9
Geometric Modeling	written exam(s), PA	g	9
Human Computer Interaction (mandatory module in the B.Sc. programme in Media Informatics at Saarland University)	written exam(s), PA	g	9
Image Processing and Computer Vision	written exam(s), PA	g	9
Information Retrieval and Data Mining	written exam(s), PA	g	9
Introduction to Computational Logic	written exam(s), PA	g	9
Machine Learning	written exam(s), PA	g	9
Operating Systems	written exam(s), PA	g	9
Optimization	written exam(s), PA	g	9
Security	written exam(s), PA	g	9
Semantics	written exam(s), PA	g	9
Software Engineering	written exam(s), PA	g	9
Digital Transmission, Signal Processing	written exam(s), PA	g	9
Verification	written exam(s), PA	g	9

Modules offered by HBKsaar

(The Examination Board may add modules to or withdraw modules from this list.)

Module category	Modules	Type of assessment	Graded/U ngraded	EC TS cr ed its
Practical skills classes	3D Studio Max, Mattbox, Audio, Video, Blender	oral, written	u	4
Studio	Typography, Layout, Advertising, Product Design	oral, written	u	4
Workshop	Print, Metal, Wood, Web, Photography	oral, written	u	4
Theory	Various	oral, written	u	4
Media, Art and Design (MAD) project	Interaction, Games, Product Design, Animation	Project work	g	8

Freely selectable modules (module category: mandatory elective)

(The Examination Board may add modules to or withdraw modules from this list.)

Modules	Type of assessment	Graded/Ung raded	ECT S credi ts
Tutoring	Tutoring	u	4
Language Courses (max. 6 credits)	oral, written	u	3 or 6
Master's level practical assignment or project	Work Placement / Internship	u	6
Modules offered by HBKsaar	oral, written	u	4
Modules from the Master's programme in Media Informatics			

Appendix B

Sample study plan – Master’s degree programme in Media Informatics

← Semester

ECTS credits →

1	Core lecture course (9 credits)	Core lecture course (9 credits)	Mandatory elective MAD (4 credits)	Mandatory elective MAD (4 credits)	Seminar (7 credits)	33
2	Work experience seminar (5 credits)	Work placement / internship (20 credits)				25
3	Advanced lecture course (6 credits)	Media, Art and Design (MAD) project (8 credits)	Freely selectable module (mandatory elective) (e.g. language course, 6 credits)		Master’s seminar (12 credits)	32
4	Master’s thesis (30 credits)					30