

Prüfungsordnung

für den Masterstudiengang "Information Systems" (englische Version)

Examination regulations

for the Master of Science (M.Sc.) programme "Information Systems" at the University of Münster (Examination Regulations 2010) effective 14 Oct. 2010 in the version issued 28 July 2015

This is a translation of the original German text and is intended for your information only. Under German law, only the official German version of the "Prüfungsordnung für den Masterstudiengang Information System an der Westfälischen Wilhelms-Universität Münster vom 14.10.2010" is legally binding. It was published in the *Amtliche Bekanntmachungen* (AB Uni; "Official Announcements") on [18 August 2015], pp. 1476.



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Scope of the Examination Regulations

These examination regulations apply to the Master of Science (M.Sc.) programme "Information Systems" at the University of Münster.

§ 2

Goal of the Programme

This master's programme builds on the knowledge acquired in a prior subject-relevant bachelor's programme. It provides students with the knowledge, skills, and methods necessary to solve complex theoretical and practical problems in the field of Information Systems.

§ 3

Master's Degree

After successfully completing the programme, the student is awarded the academic degree of "Master of Science" (M.Sc.).

§ 4

Administration of the Programme

The examination committee (*Prüfungsausschuss*) of the School of Business and Economics (FB 04) is responsible for organising the examinations in the master's programme "Information Systems".

§ 5

Admission to the Programme and Master's Examination

- (1) The admission requirements for this programme are stipulated in the current version of the "Admissions Regulations for the Master's Programme 'Information Systems'" of the University of Münster.
- (2) Admission to the master's examination is granted via enrolment in the master's programme "Information Systems" at the University of Münster, assuming the student remains enrolled at the University.

(3) Admission may be denied or revoked if the applicant applying for a place has permanently failed the master's programme "Information Systems" or a degree programme of a similar subject.

§ 6

Standard Duration, Workload, and Credits

- (1) The standard duration of the programme is two academic years. One academic year consists of two semesters.
- (2) In order to obtain the degree, students must earn a total of 120 credits (CP). Credits serve as a quantitative measure of a student's total academic workload. This includes attending courses as well as time spent on pre- and post-preparation of the course content (i.e. course attendance and revision time), taking examinations, preparing for examinations, including term papers and master's thesis, as well as, if applicable, work placements. One credit is equivalent to 30 hours of academic work. The workload for one academic year thus amounts to 1,800 hours. Consequently, the entire master's programme has a workload of 3,600 hours. One credit is equivalent to one ECTS (European Credit Transfer System) credit point.

§ 7

Content of the Programme

- (1) The master's programme "Information Systems" is not divided into individual subjects, but rather the fields "Methods of IS" and "Domains of IS". These are comprised of cross-disciplinary subject areas, two of which must be chosen by the student. At least one of the chosen subject areas must be in the field of "Methods of IS". These are supplemented by electives, consisting of seven elective mandatory modules, a "Project Seminar" module and the master's thesis module. Students are required to earn a total of 120 credits to complete the master's programme. One of the subject areas must be chosen upon registration with the Examinations Office of the School of Business and Economics. Students are permitted, however, to change their subject area once upon request to the examination committee.
- (2) Each subject area is comprised of three modules worth 6 CP each. Each module consists of a two-hour lecture and a two-hour exercise (*Übung*). Each subject area explores an overarching area of application in the field of Information Systems and its corresponding research areas. In completing a subject area, students develop a thematic profile in advanced topics of Information Systems which they will be able to apply to their future activities in the business or academic sector.
- (3) In the field "Methods of IS", students may choose from the following five subject areas:
 - 1. Information Management (IM): In this subject area, students gain insight into the management challenges of the Information Age. They also obtain an overview of the professional responsibilities of IT executives, as well as the essential concepts and methods necessary for meeting these challenges including all of the relevant theoretical background. The subject area IM consists of the following modules:
 - a) Managing the Information Age Organization (IM1)

- b) IM Tasks and Techniques (IM2)
- c) IM Theories (IM3)
- 2. Process Management (PM): As part of the subject area PM, candidates are taught methods of conceptual, formal, technical, and tool-supported design, implementation and analysis of business processes with regard to various applicable administrative scenarios. Knowledge of such methods enables prospective Information Systems professionals to effectively coordinate business information systems in the technological, competitive, and legal corporate environment. The subject area PM consists of the following modules:
 - a) Information Modeling (PM1)
 - b) Enterprise Architecture Management (PM2)
 - c) Workflow Management (PM3)
- 3. Business Networks (BN): The subject area BN addresses the chances and risks of networking in business and society, as well as evaluates alternative actions from a technical and socio-economic perspective. The subject area BN consists of the following modules:
 - a) Interorganizational Systems (BN1)
 - b) Information Security (BN2)
 - c) Network Economics (BN3)
- 4. Business Intelligence (BI): In the subject area BI, candidates gain expertise in data management and processing, statistical data analysis, and the relevant IT management support tools. The subject area BI consists of the following modules:
 - a) Management Information Systems and Data Warehousing (BI1)
 - b) Data Analytics 1 (BI2)
 - c) Data Analytics 2 (BI3)
- 5. Information System Development (ISD): The subject area ISD introduces students to concepts used for implementing and connecting information systems and their corresponding practical applications. The subject area ISD consists of the following modules:
 - a) Logic Specification and Programming (ISD1)
 - b) Data Integration (ISD2)
 - c) Advanced Concepts in Software Engineering (ISD3)
- (4) The field "Domains of IS" consists of the subject area "Logistics, Production, and Retail (LPR)".
 - In this subject area, candidates gain domain-specific expertise for developing, planning, coordinating, and integrating processes and IT systems in the areas of production, commerce, and the entire supply chain. Methodical and subject-relevant knowledge in the areas of production, trade and logistics enable Information Systems professionals to respond to domain-specific characteristics and integrate processes and IT systems in a comprehensive manner.
 - 2. The subject area LPR consists of the following modules:
 - a) Supply Chain Management and Logistics (LPR1)
 - b) Production Planning and Control (LPR2)
 - c) Retail (LPR3)

(5) Elective courses offer students the opportunity to gain in-depth expertise, specific knowledge, and skills related to their desired professional orientation and personal interests. To this end, students are required to complete seven modules including at least two seminar modules worth 6 CP each (see descriptions of elective mandatory modules in the Appendix).

In addition to these modules, candidates can enhance their professional profile according to their needs and interests by completing one or more of the following elective subject profiles:

- Information Systems: In addition to the modules for the elective subject profile "Information Systems" provided in the Appendix, candidates can specialise further in either the field of "Methods of IS" or "Domains of IS" by completing an additional module listed above in § 7 (3) and (4) as a third subject area of specialisation. If the candidate has not yet registered for two of the subject areas in accordance with § 7 (1) sent. 1 and 2, he/she must indicate when registering for the master's examination whether a completed module should count toward their core programme in accordance with § 7 (1) sent. 1 and 2, or the elective subject area.
- 2) Selected Chapters in Computer Science: The modules in the elective subject profile "Selected Chapters in Computer Science" (see Appendix) enable candidates to enhance their professional profile with knowledge of advanced problems in Computer Science.
- 3) Selected Chapters in Business Administration: The modules in the elective subject profile "Selected Chapters in Business Administration" (see Appendix) enable candidates to gain advanced knowledge in business administration in the areas of accounting, finance, management, and marketing.
- 4) Selected Chapters in Information Systems: The modules in the elective subject profile "Selected Chapters in Information Systems" (see Appendix) allow candidates to become acquainted with current and traditional subjects of Information Systems. These modules offer courses which explore subjects normally addressed in the individual modules listed above in § 7 (3) and (4) in further depth, but also include more recent aspects of Information Systems, as well as highlight the disciplinary overlap between Information Systems and Computer Science/Mathematics/Business Administration.

The seminar modules also address the themes of the elective subject profiles. In addition to knowledge transfer, seminar modules require that students work in small groups, engage in critical academic discourse by means of subject-relevant oral presentations and follow-up discussions.

Students are permitted to complete more than the required number of modules within the elective subject area. If a student completes more than seven modules, only the seven with the highest marks are counted toward the final grade, of which at least two must be seminar modules.

(6) The module "Project Seminar" (PS, 12 CP) and the master's thesis module (MT, 30 CP) broaden the knowledge and skills which the student acquired in the subject-area modules, as well as strengthen the student's methodical, social, and self-competence.

§ 8

Examination Committee

(1) The examination committee (*Prüfungsausschuss*) of the School of Business and Economics (FB 04) is responsible for organising the examinations in the master's programme and for the tasks specified in these examination regulations. The examination committee consists of four

tenured professors employed at the University of Münster, one member from the group of academic staff and two students. The term of office for professors is three years, for academic staff and for students one year.

- (2) The members of the examination committee and their substitutes are elected by the representatives of the respective groups in the faculty council (*Fachbereichsrat*) of the School of Business and Economics. Re-election is possible. Should a member resign his/her position prior to the end of his/her term, a substitute is to be selected to complete the remainder of the term. The faculty council chooses a chairperson and his/her deputy from the group of professors on the examination committee.
- (3) The examination committee ensures compliance with the stipulations put forth in these examination regulations. It regularly reports to the faculty on developments concerning the examination and study periods, the time allotted for writing the master's thesis and the weighting of the module and final grades. The report is to be published in due form in an appropriate manner. The examination committee is responsible for addressing contested decisions and, if necessary, suggesting changes to the course curriculum and examination regulations.
- (4) The members of the examination committee and their substitutes are obliged to maintain confidentiality. Committee members who are not already under such an obligation due to their position as civil servants are bound to professional discretion by the chair. The members of the examination committee and their substitutes have the right to attend all examinations.
- (5) Meetings of the examination committee are not open to the public. The student members are involved in an advisory function when pedagogical decisions are made, particularly with regard to assessing and/or recognising required coursework (*Studienleistungen*) or degree-relevant examinations (*Prüfungsleistungen*), setting examination requirements and appointing examiners and assessors.
- (6) The examination committee has a quorum when the chair or his/her deputy as well as at least two further members from the group of professors and two members from the other groups are present. In the case of § 7 (5) sent. 2, the quorum is met if, apart from the chair or deputy chair, three of the non-student members are present. Decisions are taken by simple majority of the voting members present. In the event of a tie, the vote of the chair or, in his/her absence, of his/her deputy decides the matter. For decisions on matters provided in § 7 (5) sent. 2, abstentions are not permitted.
- (7) The examination committee is an agency in the sense of administrative process and administrative procedural regulations. It can delegate the task of dealing with all noncontroversial cases to its chairperson. This does not apply to decisions on appeals. ⁴The chairperson represents the examination committee judicially and extra-judicially; his/her deputy may act in his/her stead.
- (8) The examination committee can be contacted via the Examinations Office of the School of Business and Economics (FB 04).
- (9) Regulations, dates, and deadlines and other announcements issued by the examination committee which do not concern individual persons, are to be publicised as cumulative announcements on the notice board of the Examinations Office. These announcements are legally binding and are subject to data protection regulations. Other miscellaneous announcements are permitted, but are not legally binding.

- (1) The programme is divided into modules, which are units of instruction varying in topic, content, and duration, and which lead to partial qualifications. These are defined in a learning goal related to the academic objective in question. Modules can consist of courses with different teaching and learning formats. Modules usually consist of courses offered in the same semester or over multiple semesters.
- (2) The master's examination is taken in cumulative form over the course of the programme. It consists of the degree-relevant module examinations as well as the master's thesis. See the Appendix for information on how many credit points (CP) are awarded for degree-relevant examinations, as well as how the individual grades are weighted in the calculation of the module grade.
- (3) A module is successfully completed if all module-related coursework has been completed and all degree-relevant module examinations have been passed.
- (4) With the exception of the master's thesis in accordance with § 11 (3), there are no special prerequisites for admission to modules.
- (5) There are no special prerequisites for admission to individual courses within a module, or more specifically, admission is not dependent on having previously passed a different module or another course within the module.
- (6) The courses offered in the modules are generally offered every year unless otherwise indicated in the Appendix.

Required Coursework and Degree-Relevant Examinations, Registration

- (1) Regular course attendance is recommended for all courses of the degree programme. The study objectives indicated in § 7 (5) sent. 4 require students to attend at least 80% of all seminar meetings.
- (2) Within each module, students must complete at least one required course assignment which comprises a part of the master's examination (degree-relevant examination); as a rule, each module concludes with only one degree-relevant examination. In addition, students may be required to complete one or more degree non-relevant course assignments in a module. The required coursework (Studienleistungen) and degree-relevant examinations can include written examinations, oral presentations, term papers, work placements, practical classes, project participation, oral tests, lectures, minutes, or software-aided examinations administered via schematised testing procedures and evaluated schematically in part or whole. The language of instruction and examination is indicated in the Appendix and is usually English; exceptions to the rule are to be announced by the coordinating instructor at the beginning of the corresponding course. Non-written degree-relevant examinations, as well as their evaluation, should be documented by the examiner in such a way that, if an objection is raised, the results can be validated by a second examiner by means of additional oral presentations, if necessary; this also applies to objections to those allowed to sit in on oral examinations in accordance with § 63 (4) Universities Act (Hochschulgesetz NRW, HG). Furthermore, in accordance with the provisions in the Appendix, students may be obliged to complete coursework as directed and announced by the coordinating instructor.
- (3) The Appendix defines the type, duration, and scope of the degree-relevant examinations for the respective module. These can apply to single or several courses within a module or to an

entire module (final module examination). Subject to § 10 (3) sent. 5 and 6 and within the framework provided by the Appendix, the examination committee is responsible for determining and announcing the type of examination, its modalities and the time allotted to complete the examination, or the duration of the degree-relevant examination. These should be uniform and binding for all candidates of the respective examination and should be announced at least one month prior to the examination date in accordance with § 8 (9). In accordance with the Appendix, each degree-relevant assignment or examination can be completed in the form of group work as long as the candidate's degree-relevant contribution is clearly separated and distinguishable from that of the other members to enable individual evaluation, e.g. by means of separate sections, page numbers, or other objective criteria. Furthermore, instructors who hold courses comprised of only a few students may administer oral examinations instead of written tests. These should generally take 20 minutes per candidate for a course volume of six credits. In this case (and if the Appendix offers no relevant or deviating provisions), the decision to administer an oral examination is made by the examination committee in agreement with the candidates. The decision must be announced in advance as stipulated in § 8 (9) in order to allow ample time for candidates to exercise their right to withdraw from the examination if desired in accordance with § 10 (5).

(4) Degree-relevant examinations may also consist of or include multiple-choice sections. In the case of pure multiple choice examinations, all examinees receive the same questions. All examination questions must be related to the content of the module and ensure reliable examination results. When preparing the questions, the responsible instructor must specify which answers will be recognised as correct. Examination questions must be checked for correctness with respect to the stated educational objective of the module before the examination paper is graded. Should questions be deemed incorrect or misleading in this regard, they may not be considered for grading and only the remaining questions may be taken into account. Reducing the number of multiple-choice questions may not be disadvantageous for the examinees. An examination consisting entirely of multiple-choice questions is graded as passed if at least 60 percent of the questions are answered correctly or if the number of correct answers is not more than 22 percent below the average performance of all examinees. If the candidate has answered the minimum number of items correctly required to pass, the examination is graded according to the following criteria:

"sehr gut/excellent", if at least 75 percent, *"gut*/good", if at least 50 percent, but less than 75 percent, *"befriedigend*/satisfactory", if at least 25 percent, but less than 50 percent, *"ausreichend*/pass", if no or less than 25 percent

of the additional examination questions are answered correctly.

The criteria listed above also apply to examinations which are partially comprised of multiplechoice sections. The overall grade of the examination is then calculated from the weighted arithmetic mean of the multiple-choice section and the other part of the examination. ¹²The parts are weighted according to their share of the overall examination in percent.

(5) Students must register in advance with the Examinations Office of the School of Business and Economics in order to take part in any degree-relevant examination. Registration must take place in person or through an authorised representative. If registration is electronically possible, students may register for individual examinations via the registration portal of the Examinations Office. The registration deadlines are announced via the notice board and are binding. In cases of emergency, e.g. sudden and severe illness, students may register by phone within the announced registration period. The reasons for this emergency must be substantiated as soon as possible so that the registration can be recognised. If a student fails to register within the registration period, an extension is not possible. The examination committee is responsible for further registration details and announces them accordingly.

Students may withdraw their registration without explanation and without negative consequences within 14 days prior to the examination period.

§ 11

Master's Thesis

- (1) The master's thesis should demonstrate that a student is capable of independently working on a scientific topic or project within a specified period of time in accordance with scholarly methods and that he/she is able to present and document the results appropriately.
- (2) The master's thesis is supervised and assessed by an appointed examiner in accordance with § 13. The candidate has the right to propose both the choice of topic and supervisor. If the proposed examiner declines to supervise the thesis, the examination committee appoints an examiner at the candidate's request.
- (3) Upon receiving the candidate's request, the topic of the master's thesis is assigned to the candidate by the examiner on behalf of the examination committee. Topics can only be assigned on the condition that the candidate has earned a total of 60 credits in the master's programme. The date of the topic assignment must be put on record at the Examinations Office.
- (4) The master's thesis must be completed within 16 weeks. The topic, task, and scope of the thesis are to be limited in such a manner that the time allocated will suffice. The candidate is permitted to change his/her topic only once, and only within the first four weeks of the 16-week period. In exceptional, substantiated cases and in agreement with the examiner, the examination committee may extend the submission deadline of the master's thesis by up to six weeks. The candidate must submit a request for an extension prior to the regular submission deadline. The candidate may submit an additional one-time petition for a second extension of up to four weeks in exceptional, substantiated cases.
- (5) In serious cases which would make it difficult or even impossible for the candidate to submit the master's thesis on time, the deadline may be extended upon the candidate's request. Such cases could include severe illness or immutable technical difficulties. Other valid reasons may include taking care of one's children aged 12 years and under, nursing or caring for a spouse, a registered civil partner, direct relative, or first-degree relative by marriage if such care or assistance is necessary. The examination committee is responsible for deciding on and granting extensions (in accordance with § 11 (5) sent. 1). Upon request of the examination committee, the candidate must present proof of a "valid reason". Instead of extending the deadline, the examination committee may choose, with respect to sentence 2, to assign a new topic for the master's thesis if the candidate was unable to work on the thesis for more than one year in total. In this case, the assignment of a new topic does not count as a second attempt at the master's thesis in the sense of § 16 (5).
- (6) The master's thesis must include a title page, a table of contents, and a list of works and sources cited. All parts of the thesis that contain wording or content taken from other sources must be identified as such and cited accordingly. The candidate must attach a written declaration to the thesis which states that he/she has written the thesis himself/herself, has not used sources and means other than those indicated and has identified all direct quotes. The declaration also applies to tables, sketches, drawings, graphic illustrations etc. The candidate must include a written declaration consenting to have the thesis stored in a database and compared with other texts for purposes of plagiarism monitoring.
- (7) In agreement with the examiner, the candidate may also write his/her master's thesis about

a project which he/she worked on independently or was centrally involved in carrying out. In this case, the basis of assessment is the candidate's academic concept, description, and evaluation of the project.

§ 12

Acceptance and Grading of the Master's Thesis

- (1) Candidates are required to submit two copies of the master's thesis (typewritten, bound, and paginated) as well as one digital version to the examiner by the assigned deadline; the date of submission must be put on record. If the master's thesis is submitted after the deadline or not in due form, it is graded as a fail (*nicht ausreichend*, 5.0) in accordance with § 21 (1).
- (2) The master's thesis must be assessed and graded by the examiner and a second assessor. Both grades must conform to § 17 (1) and be justified in written form. The overall grade is then calculated by taking the arithmetic mean of both grades. The provisions indicated in § 17 (3) sentences 3 and 4 are to be applied accordingly.
- (3) The candidate receives a passing grade for the master's module if the overall grade of the master's thesis is at least "pass" (*ausreichend*, 4.0).
- (4) The grading period for the master's thesis may not exceed eight weeks.

§ 13

Examiners and Assessors

- (1) The examination committee appoints examiners for degree-relevant examinations and the master's thesis; assessors (*Beisitzer*) are appointed for oral examinations.
- (2) Any individual who regularly holds relevant courses in the subject of the degree-relevant examination or master's thesis is entitled to serve as an examiner, in accordance with § 65 of the Universities Act (HG NRW), provided there are no compelling reasons to deny the appointment. The examination committee is responsible for deciding on exceptions to this rule.
- (3) Only individuals who hold a relevant *Diplom* or master's degree or an academic qualification of an equivalent or higher-level degree can serve as an assessor.
- (4) The examiners and assessors are to carry out their examination tasks independently.
- (5) Oral examinations are conducted by an examiner in the presence of an assessor. Before calculating the grade, the examiner must hear the assessor's evaluation.
- (6) Written degree-relevant module examinations are graded by a single examiner. A preliminary correction by an academic staff member is permitted.
- (7) If the candidate chooses to retake a degree-relevant examination, the examination must be graded by two examiners (see § 16 (2)). In this case, the grade is calculated as the arithmetic mean of the two individual grades. Section § 17 (3), sent. 3 and 4 apply accordingly.
- (8) The master's thesis is graded in accordance with § 12.

- (9) Should the candidate object to the grade he/she received for a degree-relevant examination, the examination committee can appoint a second examiner to reassess the examination. In case that a failed master's thesis leads to a permanently failed master's examination, a third examiner is to be appointed.
- (10) The grades for the degree-relevant examinations are to be announced within the period stipulated in § 17 (2).
- (11) The student receives electronic or written notification of grades obtained for degree-relevant examinations. The time of notification must be put on record. Electronic notification occurs via the electronic examination administration system of the School of Business and Economics of the University of Münster. If the results of degree-relevant module examinations are communicated in written form, these should be posted in the designated area of the examiner's department. The lists must identify the students who took part in the degree-relevant examinations by their student ID number. Students who have not passed a degree-relevant examination after their last attempt receive individual written notification with information on the legal remedies available to them.

Recognition of Required Coursework and Degree-Relevant Examinations from Other Programmes

- (1) Required coursework (*Studienleistungen*) and degree-relevant examinations (*Prüfungsleistungen*), from within the same programme at other German universities are recognised upon request, unless the examination committee determines that the programmes differ substantially in terms of the resulting acquired skills. The same applies for required coursework and degree-relevant examinations from other programmes at the University of Münster or other German universities.
- (2) Upon recognition of academic credit in accordance with § 14 (1) and upon request, the student may be assigned a degree-relevant semester based on the number of credits earned in a previous degree programme in proportion to the total number of credits required to complete the degree programme in question. If the first decimal place is lower than five, the number is rounded down to the previous full semester; otherwise, it is rounded up.
- (3) § 14 Sections (1) and (2) also apply to the recognition of required coursework and degree-relevant examinations completed in state-recognised distance-learning study programmes, in distance-learning units developed by the state of North Rhine-Westphalia together with the other German states or the federal government, at state or state-recognised universities of cooperative education (*Berufsakademien*), or in further education study programmes (see § 62 of the Universities Act (HG NRW)).
- (4) The basis for determining academic equivalence between degree programmes is the comparison of the content, scope, and requirements of the degree programmes in question. The determination of equivalence should not be based on a schematic comparison, but rather on an overall review and evaluation. For the equivalence of required coursework and degree-relevant examinations from foreign universities, the equivalence agreements of the Standing Conference of the Ministers of Education and Cultural Affairs of the Federal Republic of Germany and the German Rectors' Conference apply. In the case of doubt concerning equivalence, the Central Office for Foreign Education (Zentralstelle für ausländisches Bildungswesen) may be consulted.

- (5) If students are entitled to enter the programme at a higher semester after passing a placement examination, they receive academic credit in terms of both required coursework and degree-relevant examinations for the knowledge and the skills they demonstrated in the placement examination. The examination committee is legally bound by the assessments made in that examination.
- (6) Additional skills and qualifications can be taken into consideration upon the student's request when documentation is provided, as long as these are equivalent in terms of content and level to the required coursework and degree-relevant examinations which they replace.
- (7) If external examinations are recognised as degree-relevant examinations, the student is awarded the corresponding credits. The grades received for these examinations, however, are not considered when calculating the final grade of the master's examination. § 14 (7) sentences 1 and 2 do not apply for examinations passed in other degree programmes of the School of Business and Economics at the University of Münster, i.e. the examinations are recognised along with the corresponding grades. No more than 60 credits can be awarded for degree-relevant examinations completed in external degree programmes.
- (8) The student is responsible for providing the necessary documentation for recognition. This must include information on the knowledge and qualifications, for which the student is requesting recognition. If required coursework and degree-relevant examinations from other degree programmes are to be recognised, the student must provide the corresponding examination regulations, module descriptions, and Transcript of Records or equivalent document.
- (9) The examination committee is responsible for recognising academic achievement. Before equivalence can be determined, members of staff representing the subjects in question must be consulted.
- (10) The student is to be informed about the decision on recognition within four weeks after the application has been made and the required documents have been submitted. In the case of rejection, the student receives a written explanation justifying the decision.

Requirements for Students with Disabilities or Chronic Illness

- (1) If a student can demonstrate that due to disability or chronic illness he/she is partially or entirely unable to complete degree-relevant examinations in their intended form or by the deadlines provided in these examination regulations, the examination committee must increase the duration of time allocated for completing the examinations, extend examination deadlines, or permit the student to complete equivalent examinations more suited to his/her special needs.
- (2) At the student's request, the faculty representative for the disabled must be consulted with regard to decisions pertaining to § 15 (1). If consultation with a representative is not possible within the faculty, the University representative is to be consulted.
- (3) Students may be required to submit adequate documentation substantiating their chronic illness or disability. This includes, for example, medical certificates or, if applicable, a disability certificate (*Behindertenausweis*).

Passing and Retaking the Master's Examination

- (1) The master's examination has been passed when the candidate has passed all of the required modules and the master's thesis with at least a passing grade (4.0; *ausreichend*). The candidate must have also obtained a total of 120 credits.
- (2) Candidates have two attempts at passing each degree-relevant module examination; additionally, students are granted a total of three third attempts at passing degree-relevant examinations. Candidates are not permitted to retake degree-relevant examinations for the purpose of improving their grade. § 16 section (6) applies with regard to rewriting the master's thesis.
- (3) If a module examination is not passed within the number of attempts allowed, it is considered permanently failed.
- (4) Students are permitted to drop a subject area if it is not yet completed. In such cases, all degree-relevant examinations, which the student has already passed in this area, can be counted toward the elective mandatory module requirements. If the student has already completed degree-relevant examinations and coursework in the newly selected subject area, it is counted toward the subject area and the respective elective mandatory module requirements are annulled. Once a subject area is dropped, the student may not choose it a second time.
- (5) Students are permitted to drop an elective mandatory module in accordance with § 7 (5) if it is not yet completed. If the student has already completed one or more examinations in the module, these are to be counted as not taken. Once an elective mandatory module is dropped, the student may not choose it a second time.
- (6) If the candidate receives a failing grade for the master's thesis, he/she is granted one more chance to write the thesis on a newly assigned topic. The topic can only be handed back if the candidate did not make use of this possibility in his/her first attempt.
- (7) If the student does not pass a module or the master's thesis after all permitted retake attempts in accordance with § 16 (2) and (6), the module or master's thesis is marked as permanently failed. If the student has permanently failed a module in his/her selected subject area and has no possibility of selecting another subject area, or if he/she has permanently failed an elective mandatory module and has no possibility of selecting another elective mandatory module, then the master's examination is marked as permanently failed, as well. Even if the student has not used all of his/her third retake attempts in accordance with § 16 (2), the master's examination is regarded as permanently failed if there are more failed module examinations than third retake attempts available.
- (8) If the candidate permanently failed the master's examination, he/she may request a university transcript which, like the Diploma Supplement described in § 19, lists all completed coursework/examinations and their respective grades (if applicable) and states that the candidate did not pass the master's programme. In order to receive a transcript, the candidate must present his/her certificate of deregistration (*Exmatrikulationsbescheinigung*) and proof of the completed coursework/examinations. The transcript is signed by the chair of the examination committee and authenticated with the faculty seal.

Calculation of the Overall Grade

(1) The following grades should be used for evaluating the master's thesis and all degree-relevant examinations:

1 = <i>sehr gut</i> (excellent)	= an excellent achievement
2 = <i>gut</i> (good)	= a significantly above-average achievement
3 = befriedigend (satisfactory)	= an average achievement
4 = ausreichend (pass)	= an adequate achievement despite shortcomings
5 = nicht ausreichend (fail)	= an inadequate achievement due to serious shortcomings

Intermediate values may be used to differentiate assessments by raising and lowering the grades by 0.3. The grades 0.7, 4.3, 4.7, and 5.3 are excluded, however.

- (2) Grades for degree-relevant examinations must be communicated to the student no later than the end of the semester during which the examinations were taken. Section § 12 (4) applies with regard to assessment of the master's thesis.
- (3) For each module, a final overall grade is determined on the basis of the individual degreerelevant examinations assigned to that module. If a module consists of more than one degree-relevant examination, the final overall grade is determined from those grades; see the Appendix for details on how the individual grades of degree-relevant examinations are weighted for calculating the module grade. For the calculation of the module grade, all decimal places, except for the first, are deleted without rounding. This results in the following grades:

≤ 1.5	= <i>sehr gut</i> (excellent)
1.6 – 2.5	= gut (good)
2.6 - 3.5	= befriedigend (satisfactory)
3.6 - 4.0	= ausreichend (pass)
> 4.0	= nicht ausreichend (fail)

(4) The grades of the modules and the master's thesis form the final overall grade. The module grades are weighted with respect to their credit points. All decimal places, except for the first, are deleted without rounding. This results in the following grades:

≤ 1.5	= <i>sehr gut</i> (excellent)
1.6 – 2.5	= gut (good)
2.6 – 3.5	= befriedigend (satisfactory)
3.6 - 4.0	= ausreichend (pass)
> 4.0	= nicht ausreichend (fail)

(5) In addition to the final overall grade, a grade based on the ECTS grading scale is also calculated.

§ 18

Master's Certificate and Master's Diploma

- (1) When the student successfully completes his/her master's programme, he/she receives a master's certificate. This certificate contains the following information:
 - a) grade of the master's thesis
 - b) title of the master's thesis
 - c) final overall grade for the master's examination
 - d) time required to complete the master's programme
 - e) names and grades of the passed modules
- (2) The certificate carries the date of the day of the last degree-relevant examination.
- (3) In addition to the certificate, the student receives a diploma of the same date, confirming the conferral of the master's degree (see § 3).
- (4) Both the certificate and the diploma are issued with an English version of the same.
- (5) The master's certificate and the master's diploma are signed by the chair of the examination committee of the corresponding faculty and authenticated with the faculty seal.

Diploma Supplement

- (1) In addition to the certificate and the diploma, the graduate receives a Diploma Supplement. The Diploma Supplement contains detailed information about the courses and modules attended, the required coursework and degree-relevant examinations completed and respective grades, along with the individual subject-related profile chosen by the student in the programme. Any other completed modules not required by these examination regulations are to be designated as such.
- (2) The Diploma Supplement is issued in accordance with the recommendations of the German Rectors' Conference.

§ 20

Access to the Examination Files

After completing each degree-relevant examination, students can, upon request, gain access to their examination papers, the examiners' assessments, and examination minutes. If no specific date is provided to access one's examination papers, students must file their request with the examination committee via the Examinations Office no later than two weeks after the results of the examination have been announced. The examination committee stipulates the time and place of access. The same applies with regard to the bachelor's thesis or bachelor's work placement. Section § 29 Administrative Procedures Act (*Verwaltungsverfahrensgesetz*, VwVfG) shall remain unaffected.

Absence, Withdrawal, Deception, and Violation of Regulations

- (1) A degree-relevant examination is considered a fail (*nicht ausreichend*, 5.0) if the student, for no valid reason, does not appear at the examination on the designated date, or if he/she withdraws for no valid reason after beginning an examination. The same applies if a written degree-relevant examination or the master's thesis is not completed within the allocated time limit. Examples of valid reasons include severe illness and maternity leave according to §§ 3, 4, 6, and 8 of the Maternity Protection Act (*Mutterschutzgesetz*) and the Federal Parental Benefit Act (*Bundeselterngeld- und Elternzeitgesetz*), or nursing or caring for a spouse, a registered civil partner, a direct relative, or a first-degree relative by marriage if such care or assistance is necessary.
- (2) The reasons for absence or withdrawal according to § 21 (1) must be submitted immediately and substantiated in writing to the examination committee. In the case of illness, the student is obliged to present the examination committee with a medical certificate substantiating his/her condition. If the examination committee does not accept the reasons given, the student will be notified in writing. If the student does not receive written notification within a four-week period, then the reasons have been accepted. If the student withdraws on account of illness, yet there is sufficient reason to believe that the student was capable of taking the examination, the examination committee may request a medical certificate from an public medical examiner (Vertrauensarzt) in accordance with § 63 (7) HG. With respect to § 21 (2) sentence 1, sufficient reason exists, e.g. if the student has failed to appear to more than four examinations, or has withdrawn more than twice from the same examination due to severe illness in accordance with § 21 (1). The student is to be immediately notified of this decision and its reasons and provided with the names of at least three public medical examiners, designated by the University of Münster, from one of whom the student must obtain a medical certificate.
- (3) If a student attempts to influence the outcome of a degree-relevant examination or the master's thesis through dishonest means such as the use of unauthorised material or devices, the examination is regarded as not having been completed and is considered a fail (*nicht ausreichend*, 5.0). Whoever disrupts an examination may, usually after a warning by the invigilator, be excluded from continuing that particular examination; in this case, the degree-relevant examination is not completed and is considered a fail (*nicht ausreichend*, 5.0). In serious cases, the examination committee may exclude the student from the master's examination entirely. In this case, the master's examination is to be marked as permanently failed, and the reason(s) for exclusion must be put on record.
- (4) Adverse decisions must be immediately disclosed to the student by the examination committee in written form. The decision(s) must be justified and accompanied by information on the legal remedies available. Before a decision can be made, the student must be given the opportunity to state his/her case.

§ 22

Invalidity of Individual Examinations

(1) If the student knowingly manipulates the results of a degree-relevant examination or the master's thesis and if this fact comes to light only after the master's certificate has been issued, the examination committee can retroactively correct the result and, if applicable, the

grades of the degree-relevant examination or the master's thesis accordingly and declare the examination(s) in part or whole as failed.

- (2) If the requirements for the admission to a degree-relevant examination or the master's thesis were not met and the student had no intention of acting dishonestly and if this fact becomes apparent only after he/she passed the degree-relevant examination in question, the successful completion of the degree-relevant examination rectifies the mistake. However, if the student is found to have deliberately gained admission through wrongful means, the examination committee is responsible for deciding on the legal consequences, subject to the Administrative Procedures Act for North Rhine-Westphalia (*Verwaltungsverfahrensgesetz für das Land Nordrhein-Westfalen*).
- (3) If the requirements for admission to a module were not met and the student had no intention of acting dishonestly and if this fact becomes apparent only after he/she passed the module in question, the successful completion of the module rectifies the mistake. However, if the student is found to have deliberately gained admission through wrongful means, the examination committee is responsible for deciding on the legal consequences, subject to the Administrative Procedures Act for North Rhine-Westphalia.
- (4) If the requirements for enrolment in the programme and thus the requirements for admission to the master's examination were not met and the student had no intention of acting dishonestly and if this fact becomes apparent only after the master's certificate has been issued, the successful completion of the programme rectifies the mistake. However, if the student is found to have deliberately gained admission through wrongful means, the examination committee is responsible for deciding on the legal consequences, subject to the Administrative Procedures Act for North Rhine-Westphalia.
- (5) Before a final decision is made, the student must be heard, i.e. he/she has the right to state his/her case.
- (6) The erroneous certificate must be handed back and replaced with a new certificate if necessary. A decision in accordance with § 22 (1) and (2) sent. 2, (3) sent. 2 and (4) sent. 2 is excluded after a period of five years after the issue date of the certificate.

§ 23

Deprivation of the Master's Degree

A student may be deprived of his/her master's degree if it becomes apparent at a later date that the student obtained it through deception or if essential requirements for conferral were erroneously presumed to have been met. Section § 22 applies accordingly. The examination committee is responsible for such decisions.

§ 24 Transitional Provisions, Coming into Force, and Publication

- (1) These examination regulations (in their original German version) come into force on the day following their publication in the Official Announcements (*Amtliche Bekanntmachungen*) of the University of Münster.
- (2) They apply to all students who began the Master of Science programme "Information

Systems" in or after the winter semester of 2015/16.

(3) For students of the preceding cohorts subject to the regulations for the Master of Science (M.Sc.) programme "Information Systems" at the University of Münster, effective 14 October 2010, this amended version only applies, particularly with regard to the changes made in § 7 and the Appendix, until and including the SS 2018, provided the students submit a written request to the examination committee to continue studying under these regulations.

Attachment: Glossary of German-English Translations

Glossary

assessor Central Office for Foreign Education	
certificate of deregistration	
credit	
degree-relevant examination	
disability certificate	
elective mandatory module	
examination committee	
Examinations Office	
faculty	Fachbereich
faculty council	
German Rectors' Conference	Hochschulrektorenkonferenz
medical certificate	amtsärztliches Attest
public medical examiner	Vertrauensarzt
required coursework	Studienleistung
subject area	Themengebiet
Standing Conference of the Ministers of	Kultusministerkonferenz
Education and Cultural Affairs of the Federal	
Republic of Germany	

Translation: Supportstelle Englisch, WWU Münster, 2017

Appendix: Modules and Module Examinations

for the Master of Science (M.Sc.) degree programme "Information Systems" at the University of Münster