

Examination Regulations for the International Master of Environmental Sciences of the Mathematics and Natural Sciences, Legal Science, Economics and Social Sciences, Medical and Philosophy faculties of the University of Cologne

July 1, 2016

Pursuant to § 2 para. 4 and § 64 of the Act Governing the Universities of the State of North-Rhine Westphalia (University Act) in the version of the University Future Act (HZG) of September 16, 2014 (GV. NRW. at 547) the Mathematics and Natural Sciences, Legal Science, Economics and Social Sciences, Medical and Philosophy faculties of the University of Cologne have promulgated the following regulations:

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§ 1 Scope of Application

These examination regulations govern the eligibility, course of study, examination procedure and academic degree to be conferred for the International Masters of Environmental Studies program (hereinafter: IMES Program) at the University of Cologne. The content and requirements of the modules are governed in the annex. The annex is incorporated in these examination regulations.

§ 2 Program Objective

Taking into consideration the demands and changes taking place in the professional world, as well as interdisciplinary aspects, instruction and study shall impart upon students the required specialized knowledge, skills and methods in a manner appropriate to the course of study, which prepare students for scientific and artistic work and enable students to apply scientific findings and methods in professional practice, to critically evaluate scientific data and to conduct themselves responsibly. It shall be established by examinations that students have acquired interdisciplinary specialized knowledge and skills in the field of environmental sciences that enable them to combine the scientific methods and findings of the course of study with their prior education and apply them in the practical implementation in

planning, carrying out, and evaluating programs or projects with environmentally related subject matter.

§ 3 Academic Degree

Upon successful completion of the course of study, the academic degree Master of Science, M.Sc. shall be conferred.

§ 4 Eligibility, Commencement of Study, Standard Study Period, Program Organization

(1) Eligibility and admission to the program are governed by a separate set of rules.

(2) The program may only be commenced in the winter semester. The standard study period is four semesters.

(3) The program is organized by the Mathematics and Natural Sciences, Legal Science, Economics and Social Sciences, Medical and Philosophy Faculties (hereinafter: participating faculties) such that study can be completed within the standard study period. The participating faculties shall ensure the appropriate support for students in the organization of their studies by, among other things, providing counsel specific to the course of study and through measures to evaluate and ensure the quality of instruction.

(4) A program plan shall be issued and made available in the appropriate form. Such study course plan is not a component of the examination regulations.

(5) The language of instruction and examination is English.

§ 5 Study Layout and Structure

(1) Within the program, a minimum of 120 credits must be attained pursuant to § 7.

(2) The program includes the modules set forth in the annex.

(3) The program is carried out in accordance with the respective provisions of the annex of these examination regulations.

§ 6 Modules

(1) The program is structured in the form of modules.

(2) A module structure consists of subsuming subject areas into self-contained instructional units with credits, which are topically and chronologically related to each other. The content of a module shall be determined such that they can generally be taught within one semester or two semesters. In particularly justified cases, a module may also extend, however, beyond two semesters.

(3) Modules generally have a range of 6, 9, 12, 15 or 18 credits. Modules with up to 6 credits can generally be completed within one semester; all others can generally be completed in no more than two semesters.

(4) There are four module types:

- a) Core Modules, the purpose of which is to convey basic knowledge,
- b) Advanced Modules expand upon core modules. Their purpose is to deepen acquired knowledge and skills,
- c) Specialization Modules, the purpose of which is to define one's own emphasis through specialization,
- d) Supplementary Modules are not firmly established within the course of study; their purpose is to supplement individual study.

(5) Modules can be offered as required modules, optional required modules or elective modules:

- a) The study of required modules is mandatory; they are listed as such in the annex,
- b) Required modules are to be selected from a determined list and must be studied in accordance with the provisions set forth in the annex; they are listed as such in the annex,
- c) Elective modules are modules that may be freely selected from within a defined set of module offerings, which may be completed voluntarily and additionally supplement the provisions in the annex: they shall not be taken into consideration when determining the total grade pursuant to § 18 para. 5. Elective modules are listed as such in the annex.

(6) Regulations with respect to the individual modules as well as the examinations in which they culminate are set forth in the annex. These include, in particular:

- a) ID number of the module,
- b) Title of the module,
- c) Module participation requirements,
- d) Commencement of the module,
- e) Module rotation schedule,
- f) Duration of the module in semesters,
- g) Instructional form of the module and participation requirements,
- h) Examination requirements,
- i) Examination format, form and duration of the module examination and, as applicable, examination components and the modalities for passing them or retaking them,
- j) Language of examination,
- k) Attempt restrictions,

- l) Description as required or optional required modules or elective modules
- m) Module credits,
- n) For optional required modules: proportion of module credits of the credits in the respective optional requirement area,
- o) Weight of the module grade for the overall grade.

(7) Modules are completed by graded examination. For modules comprising up to 6 credits, the module examination generally consists of one examination component. In the case of modules comprising 9 credits, the module examination may consist of two examination components. For modules comprising 12, 15 or 18 credits, the module examination may consist of no more than three examination components. The corresponding regulations are set forth in the annex.

(8) If a module examination consists of more than one examination element, these shall generally represent differing examination forms and/or variations of examination forms pursuant to § 12 para. 2 to 6.

§ 7 Credits System and General Criteria on Awarding Credits

(1) Successful participation in modules is certified by awarding credits. Credits are calculated according to the students' likely workload and are a quantitative measure for the overall burden of the students. They include time spent attending classes as well as preparation and follow-up work on course material (presence and self-study), preparation for examinations and the demands of the examination, including final course work and research papers, as well as, if applicable, practical training. Credits are equivalent to the credits under the European Credit Transfer and Accumulation System. One credit corresponds to an average workload of approximately 30 hours. 60 credits should be achieved per year of study.

(2) Credits are awarded when the required final paper and examination result in the respective module have each been deemed to be passing. § 48 para. 5 HG applies with respect to obtaining credits in leave-of-absence situations. Notwithstanding this, final paper and examination results from modules that have not been completed may be included in the transcript of records.

(3) Credit may only be given once for the same instructional courses.

§ 8 Section intentionally left blank

§ 9 Course Types

(1) The following types of course are generally offered:

- a) Lecture: the coherent presentation and conveyance of scientific basic and special knowledge and of methodical findings usually in individual classes spread periodically over a semester.
- b) Seminar: discursive engagement of basic or advanced issues.

c) Practical exercise: a course accompanying a lecture or seminar. Discussion of prescribed practical exercises and deepening of educational content through independent elaboration and/or acquisition and deepening of knowledge by working on tasks or carrying out experiments.

d) Practical training: acquisition and deepening of knowledge by working on practical tasks and/or carrying out experiments. Practical training may be carried out at the university (e.g. practical laboratory work) or outside of the university (e.g. as field training, in-company training, or school internship).

e) Excursion: a course outside of the university for the purpose of observation. Students see aspects in reality related to the subject content, gather relevant factors/structures based on observation, and practice the application of acquired knowledge and/or develop scientific conclusions.

f) Language course: courses, the purpose of which is to acquire or develop foreign-language skills.

g) Project: action-oriented, independent handling of a complex task or of a problem in successive phases (planning, execution, results presentation), generally within a timeframe determined in advance.

h) Tutorial: generally a course accompanying foundational courses. Work techniques are practiced in small groups and basic knowledge is deepened; the complex subject matter of the main course is explained to the students or the theoretical content is illustrated using practical examples.

(2) The types of courses under paragraph (1) may be offered in a combined form.

(3) If a limitation on the number of participants for an instructional course due to its type or purpose or for other reasons of research, artistic development projects, instruction, artistic practice or medical care is necessary and the number of applicants exceeds capacity, the number of participants may be limited in accordance with § 59 para. 2 HG. Students who at such point in time in their course of study are required to take the course shall be given priority. The details, in particular the criteria for prioritization, are governed by the participating faculties in their own regulations. It shall be ensured within the means available that students shall not incur any loss in time through the imposition of limitations on the number of participants.

(4) Instructional courses pursuant to paragraph (1) b), provided their goal is to practice scientific discourse through presentation and discussion, those pursuant to paragraph (1) c), to the extent they are practical exercises, and pursuant to paragraph (1) d) through f) or comparable instructional courses may require regular participation. The corresponding provisions are set forth in the annex. Section 17 para. (1) through (3) apply accordingly. Regular collaboration in the instructional courses, as well as preparation and subsequent follow-up work for them is recommended.

§ 10 Course Guidance Counseling, Departmental Guidance Counseling, Examination Guidance Counseling

(1) The chairperson of the examination committee, his or her deputy, or the director of the respective examination office as well as his or her deputy, provide legally binding information regarding examination requirements and examination results.

(2) For general course guidance counseling, in particular regarding study opportunities and requirements, the center for course guidance counseling [*Zentrale Studienberatung*] of the University of Cologne is available. For interdisciplinary course guidance counseling, the guidance counseling offered across faculties is available.

(3) Departmental guidance counseling is carried out by university instructors, as well as research and teaching associates involved in the education of the course of study during office hours. Office hours are posted at the institutes and are made public via the internet. Taking advantage of individual course guidance counseling is recommended.

(4) The General Student Council [*Allgemeine Studierendenausschuss (AStA)*] and the IMES student body organization [*Fachschaft*] offer guidance counseling regarding general questions pertaining to the organization of the course of study.

(5) For special questions of foreign students and for the preparation of a study abroad, the 9th Department [*Dezernat 9*] (international) of the University of Cologne, as well as the Center for International Relations [*Zentrum für internationale Beziehungen (ZiB)*] of the Earth Sciences Department of the Mathematics/Natural Sciences Faculty offer guidance counseling.

(6) For study-related personal difficulties, the psychological counseling of the *Kölner Studierendenwerk* may be used.

(7) Students with special study requirements may take advantage of the guidance counseling of the university administration (Department 23: Special Student Issues) as well as the representative for the concerns of students with disabilities or chronic illness.

§ 11 Recognition of Results Achieved

(1) Examination results that have been attained in courses of study at other state or state-recognized universities, at state or state-recognized career academies or in courses of study at foreign state or state-recognized universities shall be recognized upon application, provided that with respect to the skills acquired, no substantial difference exists between the academic work that is being substituted. The same applies with respect to degrees conferred upon completion of courses of study within the meaning of sentence 1. Recognition within the meaning of sentences 1 and 2 is for the purposes of further study, taking examinations, enrollment in further studies or admission to doctoral studies [*Promotion*].

(2) Upon application, other proficiencies and qualifications may be recognized on the basis of submitted documentation if such proficiencies and qualifications are equivalent to the examinations, in content and level, to examination results that they are to substitute.

(3) If academic achievements are recognized, the grades are to be accepted and included in the calculation of the final grade to the extent the grading systems are comparable. In the case of grading systems that are not comparable, the designation “passed,” shall be used. A notation of the recognition of attained examination results in the certification is permitted.

(4) Students must submit the documentation required for recognition of academic accomplishments sought for recognition. The chairperson of the examination committee shall take the decision with respect to recognition. During the recognition process, faculty representatives shall be heard. The decision shall be communicated in writing to the student without delay and, in cases of a denial, shall be supported by a statement of grounds for the decision. If on the basis of an application within the meaning of paragraph (1) the recognition sought is denied, the applicant may petition the rector’s office to review the decision. The rector’s office shall provide its recommendation with respect to further handling of the application to the office responsible for recognition.

(5) The recognition of academic accomplishments obtained in another place is not possible if such academic accomplishments have already been achieved at the University of Cologne.

(6) Recognition is only possible to such extent that academic accomplishments must still be attained to such considerable degree that conferring an academic degree in accordance with these examination regulations appears justified; generally, a master’s thesis may not be recognized. Non-passing examination results shall only be recognized to the extent that the opportunity to retake the examination has not already been exhausted pursuant to § 20 para. (1). The examination committee is responsible for recognition.

§ 12 Examination Types

(1) Modules are generally concluded with a module examination, which pursuant to § 6 para. 7, are based on the learning goals and results defined for the module.

(2) Module examinations may be taken in written, oral, practical or in a combined form. The form and length of each examination requirement is set forth in the annex. For serious organizational reasons, the chairperson of the examination committee may, upon written application, specify a different or supplementary type of examination.

(3) Generally, written examination forms consist of the following types:

a) Proctored examination [*Klausur*]: A proctored examination is an assignment to be completed under supervision in which questions are provided and must be answered independently by the student alone using permissible aids. The length of a proctored examination is generally at least 45 and no more than 180 minutes and is indicated for each proctored examination in the annex. Proctored examinations may be also be taken in electronic or multiple choice form pursuant to § 13.

b) Term paper [*Hausarbeit*]: A term paper is the independent written exposition of a prescribed subject area which was dealt with within the framework of the module. It must be submitted as a file on readable data media in a format to be determined by the examiner. The term paper must include the following certification: “I hereby cer-

tify that I have prepared the attached paper independently and have not used any resources other than those indicated. Any statement that has been taken either verbatim or in a general sense from published or unpublished writings has been cited as such.“

c) A practical placement report is a written account and analysis of tasks completed in a practical placement within or outside of the university.

d) A portfolio is a compilation of several executed tasks in the broadest sense, which are evaluated in summary.

(4) Generally, the types of oral examination formats are as follows:

a) Oral examinations: In oral examinations, the examination candidate must demonstrate that he or she recognizes the various contexts given within the area of examination and is capable of placing particular questions into these contexts. Oral examinations are generally taken with at least two examiners or an examiner in the presence of a qualified observer, respectively, unless the auditability of the oral examination can be ensured through other means. An oral examination generally lasts at least 20 and no more than 45 minutes. The duration, essential course, as well as content and results are to be recorded in written minutes of the examination. Examination candidates in the same course of study shall be allowed to be present as observers upon application, provided an examination candidate does not object. The examiner shall decide on the application according to available seats. Such observation shall not include observation of the deliberation and announcement of the examination results.

b) Oral report [*Referat*]: The purpose of an oral report is to discuss a prescribed subject area and/or state of affairs in a limited amount of time. The examination shall occur as part of a course in the form of a presentation using appropriate presentation techniques as aids.

c) Oral presentation [*Vortrag*]: In an oral presentation, independently elaborated aspects and/or perspectives within a topic area are discussed in a limited amount of time using appropriate presentation techniques as aids. The examination generally occurs within the framework of an instructional course.

(5) The types of practical examination formats are generally the following: Setting up and conducting experiments, as well as examinations in which a product is created that consists of more than mere text.

(6) The types of combined examination formats are generally the following: Workplace based assessments, simulations, oral reports with written analysis, paper and presentation. Combined examinations may only include examination assessments that are suitable for verifying the acquisition of various (partial) competencies.

(7) In appropriate cases, examinations may also be conducted according to the examiner as group task or oral group examination if the individual contribution of each member of the group is clearly discernible, clearly distinguishable and capable of evaluation.

(8) An electronic proctored examination (*eKlausur*) is an examination that is conducted on a computer using an examination program, the creation, conduct and evaluation of which is supported by information and communication technologies. An electronic proctored examination is permitted when it is suitable for demonstrating that the examination candidate is proficient in the content and methods of the module in their essential correlations and can apply the acquired knowledge and skills; if necessary, it may be supplemented by other examination formats. Examination candidates shall be given sufficient opportunity prior to the examination to familiarize themselves with the electronic examination system. The electronic proctored exam shall be conducted in the presence of a competent person who shall prepare a written record of the course of the examination. The written record shall include the names of the author of the written record and the examination candidates, the commencement and termination of the examination, as well as any particular incidents that may arise. It must be ensured that electronic data can be unequivocally and permanently ascribed to the examination candidates. Pursuant to § 25, examination candidates shall be granted the opportunity to review the computer-supported examination, as well as the result he or she attains. Data protection laws shall be observed.

§ 13 Multiple Choice Examinations

(1) An examination is multiple choice when the minimum result required of the examination candidate consists solely of marking or assigning specified answers. Multiple choice examinations and/or examinations questions are only permitted if they are suitable for demonstrating that the examination candidate is proficient in the content and methods of the module in their essential correlations and can apply the acquired knowledge and skills.

(2) The examiner shall select the examination material, formulate the questions, specify the answer possibilities and establish the assessment rules, as well as the grading system pursuant to paragraph (5). The criteria for passing the examination shall be determined in advance. The deduction of points within an examination question is not permitted. Before the examination, the examiner shall conduct a review process in which the content and form of the questions is reviewed by a second examiner.

(3) Examination questions must be clearly understood, consistent, have clear answers and be suited to establishing the knowledge of the examination candidates pursuant to paragraph (1), sentence 2. Variations of the same examination questions (and answer possibilities as well) are permitted. The examiner may also create a pool of equivalent examination questions from which the examination candidates each receive different examination questions to be answered. The assignment thereof shall be done by random selection. The equivalence of the examination questions must be ensured.

(4) The examination is passed if the examination candidate has attained at least 60 percent of the total points that may be attained. If the total average in an examination of points attained, less 12 percent of the total median, is below 60 percent but not above 50 percent of the total points attained, the passing threshold is calculated in accordance with this threshold clause. A grading system that only sets forth an absolute passing threshold is not permitted.

(5) Examination results shall be evaluated as follows: If the minimum number of points that can be scored for passing has been attained, the grade to be assigned shall be

"very good"	if at least 75 percent,
"good"	if at least 50, but less than 75 percent,
"satisfactory"	if at least 25, but less than 50 percent,
"sufficient"	if none or less than 25 percent

of the excess points that can be scored have been attained. In calculating the points, increments of .5 shall be interpreted in favor of the examination candidate. If the minimum number necessary to pass the examination has not been attained, the grade shall be "insufficient" (5.0).

(6) When evaluating examination results, if a considerable accumulation of errors becomes evident in the answering of individual examination questions, the examiner, without delay, shall review the relevant examination questions prior to announcement of the examination results to determine if they are defective as measured against the requirements set forth pursuant to paragraph (3), sentence 1. The questions shall be analyzed post hoc. Complexity index, selectivity index, reliability and distractor analysis indicate the quality of the questions posed. If the review reveals that individual examination questions are defective, they shall be reevaluated or not included in the determination of the examination result. The number of examination questions to be taken into consideration in determining the examination result shall be reduced accordingly. The reduction of the number of examination questions may not negatively affect an examination candidate. If the number of points attributable to the examination questions to be eliminated exceeds 20 percent of the total points that can be obtained, the examination must be retaken in its entirety. This is also the case when an examination consists only partially of a multiple choice component.

(7) If an examination consists only partially of multiple choice questions, this Section applies, with the exception of paragraph (6), sentence 7, only for the multiple choice component of the examination.

§ 14 Section intentionally left blank

§ 15 Examination Registration and Admission

(1) Before admission to a module examination, verification shall be made that a right to examination exists. Admission to a module examination shall be granted if the examination candidate at the University of Cologne or a university with which an applicable cooperation agreement exists, is matriculated in the corresponding course of study or is admitted as a visiting student, has timely applied pursuant to paragraph (4) to the respective module examination and, as the case may be, has satisfied additional criteria pursuant to paragraph (2) and no grounds for denial exist pursuant to paragraph (3).

(2) Admission to a module examination may be premised on the verification of certain criteria. If these criteria include academic work, such academic work is always formative and is for the exclusive purpose of learning assessments for instructors and students. They are to remain ungraded. To the extent academic work requires attendance in an instructional course for which regular participation in accordance with § 9 para. (4) is not required, students shall be provided with the opportunity for alternative academic work which does not

require participation in the instructional course, but is suitable for undertaking learning assessment in a comparable manner. Academic work generally includes the following formats: electronic learning assessments, essays, exercises, homework, short oral reports, protocols, reviews, test examinations, thesis papers and similar formats. The respective criteria for admission to a module examination are set forth in the annex.

(3) Admission to a module examination shall be denied when the criteria set forth in paragraph (1) and paragraph (2) are not satisfied, the module examination has already been passed in the same or an equivalent module or the deadline for retaking the examination has lapsed. Admission shall also be denied if the examination candidate in the selected course of study at an institution of higher learning [*Hochschule*] within the purview of the Basic Law, did not finally pass an examination required by the examination regulations or lost the right to examination; this applies accordingly to related or similar courses of study. In addition, admission to an examination shall be denied if an examination candidate is on a leave of absence pursuant to § 48 para. 5 HG, unless an exception exists as set forth in § 48 para. 5, sentence 4 and sentence 5 HG.

(4) Registration is required for every module examination; a right to participation in or evaluation of any examination does not exist without registering. Registering for a module examination must generally occur no later than six weeks prior to the examination date. Notwithstanding this, § 20 para. 5 applies.

(5) The examination dates must be announced by displaying a posted notice or on the internet in an appropriate form at the start of lectures, but no later than nine weeks before the examination date. Notwithstanding this, the following applies: in the case of oral module examinations, as the beginning of lectures the examination periods must be indicated and no later than two weeks prior to the module examination the exact examination date. Students who have gained admission to a module examination have the right to participate in a published examination date; events owing to *force majeure* are the exception. Notwithstanding this, § 20 para. 5 applies.

(6) Students who are simultaneously enrolled in more than one course of study and wish to take a module examination that is a component in more than one of these courses of study must indicate upon registering for the module examination in which course of study they wish to take the module examination.

§ 16 Unregistering, Failing to Appear and Withdrawing From Examinations

(1) The deadlines for unregistering from module examinations shall be announced by posting a notice or on the internet in an appropriate form by the chairperson of the examination committee no later than nine weeks prior to the examination date. An examination candidate may generally unregister from a module examination up to no later than two weeks prior to the respective examination date without providing a reason for doing so (without cause).

(2) If an examination candidate fails to participate without cause in a module examination, the time and place of which has been set, or he or she withdraws from the same after commencement of the module examination, the examination shall be scored "insufficient

(5,0)" or "not passed". The same applies if an examination is not completed within the predetermined time for completion of the examination.

(3) If an examination candidate fails to appear for an examination or if he or she withdraws after commencement of the module examination, the chairperson of the examination committee may dispense with scoring the examination "insufficient (5,0)" or "not passed" if cause exists for doing so. The same applies if an examination is not completed within the predetermined time for completion of the examination. The reasons asserted for failing to appear or withdrawal must be provided in writing and substantiated without delay to the chairperson of the examination committee. In the case of illness, submission of a physician's note is required. In certain cases, submission of an attestation prepared by a medical officer (*vertrauensärztlicher Attest*) may be required; the university shall incur the costs therefor. The same applies in the event of a proven illness of a child, spouse, registered life partner, relative in a straight line of descent or those related by marriage in the first degree who are being cared for by the examination candidate.

§ 17 Disabilities or Chronic Illnesses

(1) The special concerns of students with disabilities or chronic illnesses shall be taken into consideration as it relates to their enjoyment of equal opportunity. If an examination candidate provides substantiation that he or she is unable to participate in a module examination in the form prescribed due to long-lasting or permanent illness, he or she shall be granted a concession for the disadvantage upon written application to the chairperson of the examination committee. To this end, the submission of a certification from a physician in a particular specialty (*fachärztliches Zeugnis*) may be required. This applies accordingly with respect to deadlines and fixed dates, as well as participation requirements in instructional courses.

(2) Availment to the protective provisions in accordance with §§ 3, 4, 6 and 8 of the Maternity Protection Act, as well as in accordance with the time limitations under the Federal Act on Parental Benefits and Parental Leave in the applicable version of each shall be enabled upon application. The taking of module examinations is possible in these cases despite a leave of absence.

(3) Particular concerns that arise through the need for care or treatment of the spouse, registered life partner, or of a relative in the first line of descent or a person related by marriage are to be given appropriate consideration, in particular with respect to set dates and deadlines as well as participation requirements in instructional courses. The application must be submitted without delay after the criteria have been met.

(4) Applications pursuant to paragraphs 1 through 3 must provide a comprehensive statement of the grounds by the examination candidate and include appropriate substantiation. Applications must be submitted in a reasonable period prior to the performance to be rendered to the chairperson of the examination committee.

§ 18 Assessment of Examinations

(1) Examinations shall be graded or assessed as "passed" or "not passed". The following grades shall be used:

1 = very good: an excellent result;

- 2 = good: a result that is significantly above the average requirements;
- 3 = satisfactory: a result that meets the average requirements;
- 4 = sufficient: a result, which despite its deficiencies, still satisfies the requirements;
- 5 = unsatisfactory: a result, which due to significant deficiencies, no longer satisfies the requirements.

By lowering or raising individual grades by increments of .3, more nuanced assessments can be given. The grades of .7, 4.3, 4.7 and 5.3 are not permitted. An examination is deemed passed if it was graded as "sufficient" (4,0), given a better grade or assessed as "passed".

(2) Examinations upon which a course of study is concluded and examination results of retaken examinations for which there exists no opportunity for concession in the event of not passing, as well as the master's thesis, must be evaluated by two examiners. If a graded examination is assessed by two examiners, the grade shall be calculated by taking the arithmetic average of the individual assessments. In the event that, pursuant to the two-examiners-principle, for a written examination the difference between individual assessments is more than one grade point or only one of the individual assessments is "unsatisfactory" (5,0), the chairperson of the examination committee shall appoint a third examiner. In such case, the grade shall be calculated by taking the arithmetic average of the three individual assessments. If the average is lower than "sufficient" (4,0), then the examination, regardless of the arithmetic average, shall be assessed as "sufficient" if two individual assessments are "sufficient" (4,0) or better. If two individual evaluations are "unsatisfactory" (5,0), the examination, regardless of the arithmetic average, shall be assessed as "unsatisfactory" (5,0).

(3) If a written examination that has been assessed as "passed" or "not passed" is assessed by two examiners, a third examiner shall be assigned by the chairperson of the examination committee who shall determine the final assessment in the event there is a difference between the assessment of the original two examiners.

(4) In the case of combined examination forms pursuant to § 12 para. 6, an overall assessment of the examination shall occur. In the event of the selection of a grade, the grade shall be identified in accordance with paragraph 1.

(5) If a module examination consists of several examination elements, the assessment shall be carried out in accordance with the provisions set forth in the annex.

(6) *Paragraph intentionally left blank*

(7) The final grade for the course of study is calculated accorded to the provisions in the annex.

(8) Grades shall be indicated using one decimal place and used in such form as the basis for further calculations; any further decimal places shall be omitted without rounding. In the transcript of records the final grade for the course of study shall be indicated with two decimal places. All further decimal places shall be omitted without rounding.

(9) Grades resulting in averages are as follows:

From 1,0 to 1,5 = very good;

From 1,6 to 2,5 = good;

From 2,6 to 3,5 = satisfactory;

From 3,5 to 4,0 = sufficient;

Above 4,0 = unsatisfactory.

(10) If all grades pursuant to paragraph 9 are "very good", the final grade shall be awarded "with distinction".

§ 19 Announcement of Examination Results

(1) The assessment of examination results shall generally be announced to examination candidates within eight weeks by entering the assessment information in the campus management system. In the event of any deviation from this rule, the grounds therefore shall be put on record. The evaluation shall be deemed as announced two weeks after placement on the campus management system. The result of an oral examination shall be provided to the examination candidate following the examination.

(2) Notification regarding the conclusive failure to pass an examination or failure to pass a master's thesis is sent formally to the postal address of the examination candidate formally on record in the campus management system and shall include a notice setting forth appeal remedies.

§ 20 Retaking Module Examinations

(1) Module examinations that have not been passed may be retaken. The number of examination attempts may, notwithstanding § 21 para. 12, be restricted to three. The provisions set forth in the annex contain additional regulations. With regard to all modules in the master's program in which the number of examination attempts is restricted to three, there shall be a total of two additional examination attempts. In addition, examination candidates who have obtained at least 90 credits shall receive an additional examination attempt. If an examination is not passed after exhausting the two additional examination attempts, as well – if applicable – the additional examination attempt as provided by sentence 5, the course of study shall be deemed conclusively as not having been passed. The additional examination attempts pursuant to sentence 4 and 5 do not refer to rewriting the master's thesis.

(2) Applications for additional examination attempts pursuant to paragraph 1 must be submitted in writing to the chairperson of the examination committee within three months after announcement of the examination result. If the application is approved, the additional examination attempt must be carried out within twelve months, calculated from the date of delivery [*Zugang*] of the approval. If a deadline is missed for reasons attributable to the examination candidate, the module examination shall be deemed conclusively has not have been passed, the consequence of which shall be ex-matriculation from the program.

(3) Applications for additional examination attempts may only be made if none of the initial three examination attempts were deemed as not having been passed on account of fraud or non-compliance pursuant to § 24.

(4) Prior to approval for an additional examination attempt pursuant to paragraph 1, resort to counseling opportunities is highly recommended. The examination candidate shall receive for such purpose a written invitation to counseling, which shall also provide information on the counseling opportunities that are available.

(5) If a module examination consists of more than one examination component, two options to pass and to retake, respectively, are possible:

a) All examination components must be evaluated as "passed" or at least "sufficient" (4,0). All of the examination components of the module examination assessed as "unsatisfactory" or "not passed" must be retaken (option A). Paragraphs 1 through 4 apply to examination components accordingly.

b) All of the examination components of the module examination enter in to the module grade in accordance with the weighting set forth in the annex. If a module grade so calculated is at least "sufficient" (4,0) overall, the module examination is deemed passing. If the module grade so calculated is lower than "sufficient", examination components evaluated as "unsatisfactory" (5,0) must be retaken until the module examination overall is deemed at least "sufficient" (4,0). Examination components that have been passed may not be retaken. Module examinations in accordance with this rule are not subject to attempt restrictions (option B).

The option determined for each module is set forth in the annex.

(6) In the case of repeat examinations, the chairperson of the examination committee may, upon application of the examiner, determine a different examination form or variations of the respective examination form.

(7) In the case of repeat examinations, there may be deviations from the periods set forth in 15 para. 4 and 5 if cause is shown.

(8) § 21 para. 12 governs the repetition of a master's thesis.

(9) The retaking of module examinations that have been passed is not permitted.

§ 21 Master's Thesis Module

(1) ¹The Master's Thesis Module consists of the preparation of the master's thesis and an oral final examination on the master's thesis. The formulation of the grade for the Master's Thesis Module is governed by the annex. The master's thesis is a type of examination in the form of an independently authored work that should demonstrate that the examination candidate is able in a scientific manner to deal with and reflect on a thematically restricted problem from the subject-matter area of the program using the required methods in a set period of time.

(2) The master's thesis is prepared alongside participation in the program. 30 credits shall be awarded for the Master's Thesis Module. The criteria for admission to the master's thesis are set forth in the annex.

(3) *Subsection intentionally left blank*

(4) The chairperson of the examination committee shall assign an examiner pursuant to § 23 para. 3 to select the topic of the master's thesis. With respect to the selection of the topic and of the examiner, the examination candidate shall have the right to make a proposal. The topic shall be notified in writing to the examination candidate by the chairperson of the examination committee, thereby setting forth the date by which the master's thesis must be submitted. The day on which the topic is issued shall be put on file. The topic can be returned once within two weeks upon issuance.

(5) As of the date the topic is issued, the time for completing the master's thesis shall be no more than six months. The length of the master's thesis shall not exceed 100 DIN A4 pages (12-point font, 1.5 line spacing). The topic of the master's thesis must be selected in terms of content and length such that it can be completed within the time period set forth in sentence 1. Upon written application that includes a statement of grounds, the examination committee may grant a grace period of no more than twelve weeks; the application must be submitted prior to expiry of the deadline to the examination office. Notwithstanding this, the provisions of § 17 shall apply.

(6) The master's thesis shall be written in English. Notwithstanding this, the chairperson of the examination committee may, upon application submitted by the examination committee and with the consent of the examiner, permit the master's thesis to be written in another language, provided the second assessor can be ensured.

(7) The guidelines for good scientific practice apply to the preparation of the master's thesis. The master's thesis may not have been submitted in the same or similar form or as an excerpt during the course of another examination. In the event of a failure to comply with this paragraph, the work shall be assessed as "insufficient" (5,0).

(8) The master's thesis must contain a bibliography. Further, the following certification must be included: "I hereby certify that I have prepared the attached paper independently and have not used any resources other than those indicated. Any statement that has been taken either verbatim or in a general sense from published or unpublished writings has been cited as such." The work has not been submitted in the same or similar form or as an excerpt during the course of another examination. I certify that the submitted electronic version is fully equivalent to the print version submitted." If the certification is falsely made, the legal consequences arising from § 63 para. 5 HG may apply.

(9) The master's thesis must be timely submitted in triplicate – two printed and bound copies and one write-protected electronic version – to the appropriate examination office; the day of submission shall be recorded on file. If the master's thesis is not submitted timely, it shall be deemed "insufficient" (5,0).

(10) The chairperson of the examination committee shall forward the master's thesis to the examiner as the first assessor. At the same time, the chairperson shall assign an additional assessor pursuant to § 23 para. 3 with respect to the second assessment.

(11) The assessment of the master's thesis shall generally be notified to the examination candidate within eight weeks after submission of the work by entering the assessment information in the campus management system. If there is any deviation from this rule, the grounds therefore shall be recorded on file. The assessment is deemed announced two weeks after entry in the campus management system.

(12) A master's thesis assessed as "insufficient" (5,0) may be repeated once with a new topic. Registration to repeat the master's thesis must occur within three months. A second repetition of a master's thesis that has not been passed is not permitted. The repetition of a master's thesis that has been passed is not permitted.

(13) Notice of not having passed the master's thesis shall be sent to the examination candidate by the chairperson of the examination committee to the postal address formally on record in the campus management system and shall include a notice setting forth appeal remedies.

(14) Submission of the master's thesis serves as registration for the oral final examination for the Master's Thesis Module. The oral final examination is a mandatory part of the Master's Thesis Module and is taken as an interdisciplinary individual examination. The examination date shall be notified to the examination candidate no later than three weeks prior to the examination. If the master's thesis was examined by two examiners, the chairperson of the examination committee shall appoint such persons as examiners for the oral final examination. If the master's thesis was evaluated by three examiners, the chairperson of the examination committee shall appoint such examiners, notwithstanding § 18 para. 2, as examiners for the oral final examination. Notice of the oral final examination shall be effective one week prior to the respective examination date, provided the master's thesis was awarded a grade of "sufficient" (4,0) or better and the examination candidate has not submitted a written withdrawal with a statement of grounds by such date; § 16 para. 3 and § 17 apply accordingly. The chairperson of the examination committee may appoint an observer who shall prepare written minutes. The chairperson of the examination committee shall notify the examination candidate of the name of the examiner and, if applicable, of the observer of the oral examination no later than five business days prior to the date of the final examination. In the oral examination, the examination candidate shall depict the content of his or her master's thesis in a ten to fifteen minute presentation in thesis format. The examiners shall pose questions thereafter and discuss the master's thesis with the examination candidate. The oral examination shall have a total length of 40 to 60 minutes. Students in the IMES program are entitled to participate in the oral examination, provided the examination candidate does not object. Admission to participate does not extend to the deliberations on and announcement of the examination result. Written minutes shall be prepared containing the essential results of the oral examination. The result of the oral examination shall be notified to the examination candidate directly following the oral final examination. The oral final examination on the master's thesis may, in the event it is not passed, be repeated twice. An oral examination that has not been passed should be repeated within six weeks after the first attempt. If the oral final examination is repeated, the chairperson of the examination committee may appoint different examiners for the oral final examination.

(15) Notice regarding failure to pass the Master's Thesis Module shall be sent to the examination candidate by the chairperson of the examination committee to the postal ad-

dress formally on record in the campus management system. The notice shall include information regarding appeal remedies.

§ 22 Examination Committee

(1) The participating faculties shall establish an examination committee to organize the examinations and the obligations set forth in these regulations. At least two members of the participating faculties shall be represented.

(2) The examination committee is an administrative body within the meaning of administrative process and administrative procedural law.

(3) The examination committee consists of the following six voting members:

1. The chairperson of the faculty instructor group,
2. Two additional members from the faculty-instructors group,
3. A member from the research and teaching assistants group,
4. A member from the technical and administrative employees group,
5. A member of the student group.

(4) The examination committee shall elect an alternate for the chairperson from among the members set forth in paragraph 3, no. 2.

(5) For each of the members set forth in paragraph 3, no. 2 through no. 5, an alternate shall be elected. The alternate becomes active if members from the respective group are prevented from carrying out their collaboration.

(6) The chairperson may include additional persons, particularly alternate members, in the meetings of the examination committee, provided it appears expedient to do so and a majority of voting-members present do not object.

(7) The members and their alternates shall be elected by the participating faculties separately by group. The groups shall have a right to put forward a proposal. The members of the university-lecturers group, the research and teaching assistants group and technical and administrative employees are selected for three years; the member of the student group, for one year. Reelection is permitted. The term of an alternate ends at the same time as the term of the corresponding member. If a member or alternate resigns early, a succes-

sor shall be elected for the term remaining.

(8) A voting quorum of the examination committee exists if the chairperson or his or her alternate and at least three additional members are present, of those at least one from the university-lecturers group. In matters that directly concern instruction, with the exception of its assessment, it must be ensured that the members of the university-lecturers group have at least more than half of the votes. A simple majority of those present is required for the examination committee to take a decision. In the event of a tie, the vote of the chairperson shall be decisive. A member from the group of technical and administrative employees shall have in instructional matters a voting right only insofar as he or she performs corresponding functions at the university and has particular experience in the respective area. The chairperson shall decide with respect to whether these criteria are met or the rector's office in cases of doubt at the commencement of the member's term. The member from the student group shall not vote in pedagogical/scientific decisions, particularly in the event of assessing and recognizing examination achievements, the selection of examination questions as well as decisions of objection with respect thereto.

(9) The examination committee shall take care that the provisions of these regulations, including those of the annex, are complied with. It shall decide, in particular, with respect to objections against decisions taken in examination proceedings. It shall regularly report to the participating faculties at least once a year regarding the development of master examinations and study times, shall disclose the distribution of final grades and, as the case may be, provide suggestions on amendments to these regulations.

(10) Meetings of the examination committee are not open to the public. Members and their alternates are subject to the official duty of confidentiality. If they are not public employees, they shall be compelled to confidentiality by the chairperson.

(11) The members of the examination committee, as well as their alternates, have the right to be present in examinations. The authority to be present does not extend to deliberations regarding the examination result.

(12) For the organizational handling of the examination process, the examination office of the Geological Sciences Department of the Mathematics and Natural Sciences Faculty shall be at the disposal of the examination committee.

(13) The chairperson of the examination committee or his or her alternate in the event of disability shall represent the examination committee both in and out of court. He or she convenes the meetings of the examination committee, chairs the meetings and carries out the decisions taken there. The examination committee may confer upon the chairperson the handling of all duties in standard cases. The chairperson shall decide in emergency cases in which the examination committee cannot be timely convened and shall provide a report on the matter at the next meeting. Decisions regarding objections are reserved to the examination committee.

(14) The chairperson of the examination committee shall announce orders, the establishment of deadlines and terms, and notices of the examination committee, which do not affect individual persons only, with legally binding effect by displaying notices or in another appropriate manner.

§ 23 Examiners, Observers and Electronic Verification

(1) The appointment of examiners is made from within the university-instructors group as well as from those members and persons belonging to the participating faculties pursuant to § 65 para. 1 HG; in special cases, members and those belonging to other universities may be appointed as examiners. Examinations may only be assessed by persons who themselves possess the qualification established by the examination or have an equivalent qualification. Examiners who have withdrawn can be appointed again as examiners. Only those persons who have attained the relevant degree at the master's level at a university may be appointed as observers.

(2) The examination committee appoints the examiner, as well as the observer. It may delegate such appointment to the chairperson. The appointment of examiners and observers shall be recorded on file.

(3) The chairperson of the examination committee appoints the competent examiners for the master's thesis from the professors, adjunct professor, honorary professors, junior professors and private lecturers. In exceptional duly justified cases, the chairperson of the examination committee shall decide on the appointment of additional examiners who satisfy the criteria set forth in § 65 para. 1 HG. University lecturers from an institution of higher learning associated via a partnership or cooperation agreement may be appointed, upon application that includes a statement of grounds from a university lecturer representing a major, to issue a topic for a master's thesis. The appointment of examiners for the master's thesis shall be recorded on file.

(4) The examiners shall identify, in agreement with the examination committee, the resources and work aids permitted for the examinations accepted by them and shall timely announce them no later than the announcement of the examination date for the respective examination in an appropriate manner. In the event an agreement cannot be reached, the examination committee shall decide.

(5) Upon a general and announced decision of the examination committee, written examinations may be reviewed electronically with regard to text taken from other sources which is not cited. In such case, examination candidates are required to also submit examinations electronically and to ensure the contents of the written and electronic versions are the same. An electronic review in accordance with sentence 1 also includes the use of written examinations for the purpose of comparison with the written examinations of third parties, provided there is a substantive connection between the examinations. The decision set forth in sentence 1 must provide

a) which examinations may be electronically reviewed,

b) whether the examination committee shall employ the use of an administrative aid and, if so, who such person shall be,

- c) the file format of, method for and location the electronic version's submission,
- d) the criteria according to which the examinations to be reviewed shall be selected, and
- e) how long the electronic versions may be used.

Notwithstanding a), in cases of initial suspicion for fraud, electronic review is always permitted. Notwithstanding e) use shall end no later than simultaneously to the record retention period for examination files pursuant to § 26 para. 4. Any other use of the electronic version which does not serve the objective of evaluation by the examiners or the examination committee is not permitted. The result of an electronic review may only serve as the basis for an adverse decision if it has been confirmed by the responsible examiners.

(6) Examiners are not bound by instructions in the course of their examination activity. They, and if applicable, the observers are subject to official confidentiality. If they are not public employees, they shall be obligated by the chairperson of the examination committee to maintain confidentiality.

§ 24 Fraud, Violation of the Regulations

(1) If an examination candidate attempts to influence the result of an examination for their own benefit through fraudulent means, such as through the use of resources and work aids that are not permitted, the examination in question shall be assessed as "insufficient" (5,0) or "not passed". In serious cases, such as in cases of scientific misconduct, or in a repeat case, the examination committee may exclude the examination candidate from the performance of additional examinations, whereby the right to examination in the program terminates. Scientific misconduct exists, in particular, if the following are done intentionally, deliberately or in a grossly negligent manner

1. misrepresentations are made in scientific work,
2. under the pretension of authorship (plagiarism), the intellectual property of others is infringed through improper use,
3. the intellectual property of others is presented in a distorted manner,
4. serious impairment of the research activities of others is caused.

(2) One who disrupts the acceptance of an examination submission may be excluded by the respective examiners or proctors from the performance of additional examinations; in such case, the examination shall be assessed as "insufficient" (5,0) or "not passed". The grounds for the exclusion are to be recorded on file.

(3) Prior to a decision pursuant to paragraph 1 and 2, sentence 1, second clause, the examination candidate shall be given a legal hearing. The decision shall be notified without delay in writing to the examination candidate; it shall be accompanied by a statement of grounds and include a notice regarding appeal remedies.

(4) One who acts in the manner set forth in paragraph 1 acts no less than in violation of the regulations. A violation of the regulations also exists when one attempts to influence the

result of an examination for the benefit of another. The violation of the regulations may be prosecuted pursuant to § 63 para. 5 HG.

§ 25 Invalidity of Examinations, Revocation of the Master's Degree

(1) If the criteria for admission to perform an examination were not fulfilled without any desire on the part of the examination candidate to mislead on this point, and if such fact does not become known until after conferring the certificate, such defect shall be cured by having passed the examination. If the examination candidate intended wrongly to obtain admission, the examination committee shall decide, taking into consideration the provisions of the Administrative Procedure Act of the State of North-Rhine Westphalia (VwVfG NRW) regarding the legal consequences.

(2) If an examination candidate cheats in an examination and this fact does not become known until after conferral of the certificate, the examination committee may retroactively correct the assessment accordingly for such examination, in the course of which the examination candidate cheated, and declare the examination wholly or partially not passed.

(3) Revocation of the master's degree may occur if it is determined that it is obtained on account of fraud or if substantial criteria for its conferral were mistakenly viewed as having been met.

(4) The examination candidate shall be provided the opportunity prior to a decision pursuant to paragraphs 1 through 3 to respond. The examination committee is responsible for the decision, which takes it decision in consideration of the provisions of the Administrative Procedure Act of the State of North-Rhine Westphalia (VwVfG NRW). A decision is precluded after a period of five years from the date of the certificate.

(5) The incorrect certificate, as well as all incorrect attachments shall be collected and, as the case may be, re-issued. If the course of study was declared not passed in its entirety, the academic degree shall be revoked by the participating faculties and the master's degree certificate shall be collected.

§ 26 Examination Files, Inspection of Files

(1) An examination file shall be maintained for each examination candidate by the examination committee. The examination file documents in particular examination attempts, examination papers, the evaluation opinions related thereto by the examiners, examination minutes, examination results, grade calculations and copies of certificates and instruments.

(2) An examination candidate can request information at any time regarding the status of examination results within the organizational means available.

(3) After an examination result is announced, each examination candidate or a person authorized by power of attorney may, upon written application, be permitted to inspect his or her written work in such examination, the evaluation opinions related thereto and the corrections of the examiners, as well as the written minutes on oral examinations. The examination committee controls any additional procedure related to such inspection. After expiration of the established deadlines, inspection is only possible if an examination candidate can prove he or she is not responsible for missing the deadline.

(4) The examination file shall be retained until the fifth year after termination of the program and after expiration of such period shall be offered to the corresponding responsible archive. With the exception of master's theses, written examination files may be offered to the archive one year after termination of the year in which the examination result was announced, provided no legal dispute is pending; this also applies accordingly to electronic versions. Academic degrees and a catalogued collection of certificates and instruments conferred may be retained in a registry until the termination of the fifteenth year following the completion of studies; sentence 1, clause 1 applies accordingly.

§ 27 Completion of the Program and Program Completion Documents

(1) The program is completed when all required examinations are passed and the corresponding credits have been attained. A certificate shall be issued for passing the program. The certificate shall be signed by the chairperson of the examination committee and shall contain the final grade and the grade for the Master's Thesis Module. Grades shall be listed in words and in numbers. It shall be issued with the date of the day on which the last examination is taken or recognized. In addition, an English translation of the certificate shall be issued. The German version shall be legally binding.

(2) Along with the certificate, the student shall be issued the master's degree certificate, which certifies conferral of the degree pursuant to § 3; it shall bear the date of the certificate. The master's degree certificate shall be signed by the Dean of the Mathematics and Natural Sciences Faculty, as well as by the chairperson of the examination committee and include the seal of the Mathematic and Natural Sciences Faculty.

(3) Along with the certificate and the master's degree certificate, a diploma supplement in German and English shall be issued, which provides information on the professional nature of the course of study completed and the academic and professional qualifications obtained upon completion. The diploma supplement additionally describes the course of study completed and provides information about the participating faculties. ³A component of the diploma supplement is the transcript of records.

(4) If a student has not passed, not finally passed or failed to complete the program, he or she shall, upon application, be provided with a transcript of records setting forth the examinations taken, supplemental studies and coursework, grades and credits attained. It must show, as the case may be, that the program was not passed or was not finally passed.

§ 28 Transitional Provisions

(1) These regulations are applicable to all students who are matriculated or have been admitted as guest students at the University of Cologne for the IMES program as of the 2016/2017 winter semester.

(2) Students who already are matriculated or have been admitted as guest students at the University of Cologne for the IMES program on September 30, 2016 may continue the program through recognition of examinations already taken in accordance with these regulations. A written application for such change must be submitted to the chairperson of the examination committee and may not be reversed.

(3) Students who commenced their studies prior to these regulations entering into force may end their studies in accordance with the IMES study regulations of July 7, 2008 (official notice 42/2008) and the IMES examination regulations of April 20, 2006 (official notice 28/2006), amended by regulations dated December 12, 2006 (official notice 11/2007), until October 1, 2019.

§ 29 Publication and Entry Into Force

(1) These regulations enter into force on October 1, 2016. At the same time, the study regulations of July 7, 2008 (official notice 42/2008) and the examination regulations of April 20, 2006 (official notice 28/2006), amended by regulations dated December 12, 2006 (official notice 11/2007), are repealed. Section 28, para. 3 remains unaffected.

Issued on the basis of the resolutions of the select faculty-committees [*Engere Fakultäten*] of the Mathematics and Natural Sciences Faculty dated April 28, 2016, the Legal Sciences Faculty dated June 9, 2016, the Economics and Social Sciences Faculty dated May 23, 2016, the Medical Faculty dated April 6, 2016 and the Philosophical Faculty dated May 25, 2016, as well as pursuant to the resolution of the rector's office dated June 14, 2016.

Cologne, July 1, 2016

June 28, 2016

Prof. Dr. Ansgar Büschges

Dean
of the Mathematics and Natural
Sciences Faculty of the University
Of Cologne

June 30, 2016

Prof. Dr. Ulrich Preis

Dean
of the Legal Sciences Faculty
of the University of Cologne

July 1, 2016

June 28, 2016

Prof. Dr. Dr. h.c. mult. Thomas Krieg

Dean
of the Medical Faculty of
the University of Cologne

Prof. Dr. Stefan Grohe

Dean
of the Philosophy Faculty
of the University of Cologne

June 28, 2016

Prof. Dr. Werner Mellis

Dean
of the Economics and Social Sciences
Faculty of the University of Cologne

Annex Specific to the IMES Program

I. Program Structure and Calculation of the Final Grade:

The program, which encompasses four semesters, is divided into three phases and consists of basic and advanced modules.

a) Basic module phase: In the basic module phase, at least 60 credits are attained. The modules identified in this annex as required must be registered for. Additional modules must be registered for according to one's individual emphasis (optional required module), whereby in addition to Introduction to Env. and Soc. Sciences, at least 6 additional credits from the social and natural sciences must be evidenced by the student. Registration for the "Introduction to Env. and Soc. Sciences" (basic module) the "Integrated Adv. Module in Env. Sciences" (advanced module) and the Master's Thesis Module is required.

b) Advanced module phase: In the advanced module phase at least 30 credits are attained. Attaining the credits in the corresponding basic module is required to participate in advanced modules. In addition to modules identified in the module handbook as required, two additional modules must be selected according to individual choice.

c) Master's thesis module phase: In the master's thesis module phase, the master's thesis is prepared. Entry into the master's thesis module requires attaining at least 60 credits in the basis module phase and an additional 30 credits in the advanced module phase. In exceptional and substantiated cases, commencement of the master's thesis may occur, as well, if the advanced module phase has only been partially terminated. The master's thesis and the oral final examination are assessed with 30 credits. After completion of the program, students will have attained at least 120 credits.

d) The final grade of the master's examination is based on the weighted average of individual grades.

e) If the standard period of study has not been exceeded, additional basis modules may be registered beyond the 60 credits. They are not incorporated in the final grade.

II. Module Brief Descriptions¹:

Title of the module ²	Course number	Module Participation Requirements	Commencement Rotation Module duration	Course formats and participation requirements (PR)	Examination Requirements	Examination type Duration of the examination Number of examinations ³ Language of the module final examination	Attempt restriction	Required module (R) Required elective module (RE)	Module credits Sum of credits in the required areas	Weighting of the module grade in the final grade. Calculation: Number of credit points per course/120	Basic module (B) or Advanced module (A)	Natural (N) or Social sciences (S)
Introduction to Env. and Soc. Sciences • Lecture Series • Excursions	MA-IMES-B-Int	None	Begin: WiSe (1. Sem.) Rotation: annually Duration: 1 Sem.	Lecture, Excursion (PR)	Participation in 6 excursions	Examination type: written examination Duration: 90 min Number: 1 Language: English	3	R	6	5%	B	N/S
Atmosphere I	MA-IMES-B-	None	Begin: WiSe	Lecture	None	Examination type:	3	RE	6	5%	B	N

¹ IMES endeavors to offer the courses listed here in the rotations indicated. In special circumstances, individual modules/courses may be cancelled, however.

² The IMES Board reserves the right to include additional modules and instructional offerings.

³ All examination components must be assessed as "passed" or at least "sufficient" (4,0). All examination components of module examinations assessed as "insufficient" (5,0) or "not passed" must be repeated. For examination components, § 20 para. 1 through 4 of the examination regulations apply accordingly.

<ul style="list-style-type: none"> • Introduction to Synoptic Meteorology • General Aspects of Meteorology 	At1		(1. Sem.) Rotation: annually Duration: 1 Sem.			Written examination Duration: 180 min Number: 1 Language: English							
Atmosphere II <ul style="list-style-type: none"> • Chemistry of the Atmosphere 	MA-IMES-B-At2	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 1 Sem.	Lecture	None	Examination type: Written examination Duration: 180 min Number: 1 Language: English	3	RE	6	5%	B	N	
Biosphere <ul style="list-style-type: none"> • Ecology I • Ecology II 	MA-IMES-B-Bio	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Lecture	None	Examination type: Written examination Duration: 180 min Number: 1 Language: English	3	RE	6	5%	B	N	
Geosphere <ul style="list-style-type: none"> • Introduction to Environmental Geophysics (WiSe) • Landscape Formation (SoSe) 	MA-IMES-B-Geo1	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Lecture	None	Examination type: Written examination Duration: 180 min Number: 1 Language: English	3	RE	6	5%	B	N	
Hydrology <ul style="list-style-type: none"> • Physical Hydrology 	MA-IMES-B-Geo2	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 1 Sem.	Lecture	None	Examination type: Written examination Duration: 90 min Number: 1 Language: English	3	RE	3	2,5%	B	N	
Env. Economics <ul style="list-style-type: none"> • Energy, Resources, Environment and the Economy 	MA-IMES-B-Eco	None	Begin: SoSe (2. Sem.) Rotation: annually Duration: 1 Sem.	Lecture, Practical exercise	None	Examination type: Written examination Duration: 90-120 min Number: 1 Language: English	3	RE	6	5%	B	S	
Env. Medicine <ul style="list-style-type: none"> • Environmental Medicine I • Environmental Medicine II 	MA-IMES-B-Med	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Lecture	None	Examination type: Written examination Duration: 180 min Number: 1 Language: English	3.	RE	6	5%	B	N	
Env. Law <ul style="list-style-type: none"> • Introduction to Comparative Environmental Law Systems • Introduction to International Environmental Law Systems 	MA-IMES-B-Law	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Lecture	None	Examination type: Term paper Length: 10 – 12 pages Number: 2 (Grade: 50%/50%)	3	RE	6	5%	B	S	

						Language: English						
Env. Politics <ul style="list-style-type: none"> • Political Ecology (SoSe) • EU Environmental Policies and Policy-Making (WiSe) 	MA-IMES-B-Pol	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Seminar	None	Examination type: Combined examination format: term paper with oral presentation or project work Length: 10 – 12 pages Number: 1 Language: English	3	RE	6	5%	B	S
Env. Management <ul style="list-style-type: none"> • Environmental Policy and Management (WiSe) 	MA-IMES-B-Ma	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 1 Sem.	Seminar	None	Examination type: Combined examination format: term paper and practical exercise Number: 1 Language: English	3	RE	3	2.5%	B	S
Anthropology <ul style="list-style-type: none"> • Introduction to Human and Environment Relations • Environmental Sociology: Basic Approaches and Research Results 	MA-IMES-B-Anth	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Seminar (PR)	Active participation in seminars	Examination type: Combined examination format: term paper and oral presentation Length: 10 – 12 pages Number: 1 Language: English	3	RE	6	5%	B	S
Education <ul style="list-style-type: none"> • Env. Education (SoSe) • Basic Aspects of Environmental Education and Didactics (WiSe) 	MA-IMES-B-Edu	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 2 Sem.	Seminar	None	Examination type: Combined examination format: oral presentation Duration: 20-45 min Number: 1 Language: English	3	RE	6	5%	B	S
Introduction to <ul style="list-style-type: none"> • Env. Statistics 	MA-IMES-B-Intro-Sta	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 1 Sem.	Lecture, Practical exercise	None	Examination type: Written examination Duration: 90 min Number: 1 Language: English	3	RE	3	2.5%	B	N/S
Introduction to <ul style="list-style-type: none"> • Env. Chemistry 	MA-IMES-B-Intro-Che	None	Begin: WiSe (1st Sem.) Rotation: annually Duration: 1 Sem.	Lecture, Practical exercise	None	Examination type: Written examination Duration: 90 min Number: 1 Language: English	3	RE	3	2.5%	B	N

Geographic Information Systems (GIS)	MA-IMES-B-GIS	None	Begin: SoSe (2nd Sem.) Rotation: annually Duration: 1 Sem.	Practical exercise (PR)	Participation in practical exercise	Examination type: Combined examination format: Written examination with project work Duration: 90 min Number: 1 Language: English	3	RE	3	2.5%	B	N
Integrated Adv. Module in Env. Sciences	MA-IMES-A-GIS	Completion of the first phase of the program	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Seminar (PR)	Participation in the seminar	Examination type: Combined examination format: Project work with oral presentation Length: 12-15 pages Number: 1 Language: English	3	P	6	5%	A	N/S
Advanced Module Atmosphere I (Meteorology)	MA-IMES-A-At1	Completion of the first phase and of the Atmosphere I module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Lecture, Seminar (PR), Practical exercise (PR)	Participation in the practical exercise and seminar	Examination type: Written examination Duration: 180 min Number: 1 Language: English	3	RE	12	10%	A	N
Advanced Module Atmosphere II • Practical training in the Jülich Research Center	MA-IMES-A-At2	Completion of the first phase and of the Atmosphere II module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Practical training (PR)	Participation in practical training	Examination type: Practical training with written protocol Duration: Semester Number: 1 Language: English	3	RE	12	10%	A	N/S
Advanced Module Biosphere • Applied issues of Aquatic and Microbial Ecology • Interactions between Eukaryotic Microorganisms	MA-IMES-A-Bio	Completion of the first phase of the program and of the Biosphere module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Seminar, Lecture, Practical training (PR)	Participation in practical training	Examination type: Written protocol (Grade 60%), oral presentation (Grade: 40%) Length: 15-20 pages Number: 2 Language: English	3	RE	12	10%	A	N
Advanced Module Geosphere • Geophysics	MA-IMES-A-Geo	Completion of the first phase of the program and of the Geosphere mod-	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Seminar, Practical training (PR)	Participation in practical training	Examination type: Written protocol and oral presentation Length: 15-20 pages Number: 1 Language: English	3	RE	12	10%	A	N

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Advanced Module Hydrosphere • Seminar: Topics of Hydrology and Water Resources Management • Practical: Methods in Physical Hydrology • Research seminar	MA-IMES-A-Hydro	Completion of the first phase of the program and of the Hydrology module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Seminar (PR), Practical exercise (PR)	Participation in the seminar and practical exercise	Examination type: Written protocol (Grade: 50%), oral presentation (Grade: 25%), written protocol of the practical work (Grade: 25%) Number: 3 Language: English	3	RE	12	10%	A	N
Advanced Module Env. Law • Conservation Law • Conservation Law Field Work • European Environmental Law • Law of Climate Change • Transboundary Water Conflict	MA-IMES-A-Law	Completion of the first phase of the program and of the Env. Law module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Lecture	None	Examination type: Term paper (Grade: 80%) and oral presentation (Grade: 20%). Length: 15-20 pages Number: 2 Language: English	3	RE	12	10%	A	S
Advanced Module Env. Policy and Management • Environmental Policy and Management	MA-IMES-A-Ma	Completion of the first phase of the program and of the Env. Management module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Seminar (PR)	Participation in the seminar	Examination type: Term paper (Grade: 60%), oral presentation (Grade: 40%) Length: 15-20 pages Number: 2 Language: English	3	RE	12	10%	A	S
Advanced Module Political Ecology & Env. Governance	MA-IMES-A-Pol	Completion of the first phase of the program and of the Env. Politics module	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Seminar	None	Examination type: Project work (Grade: 60%), and oral presentation (Grade: 40%) Length: 15-20 pages Number: 2 Language: English	3	RE	12	10%	A	S
Advanced Module Env. Spatial Methods	MA-IMES-A-GIS	Completion of the first phase of the program and of the Geographic Information Systems	Begin: WiSe (3rd Sem.) Rotation: annually Duration: 1 Sem.	Lecture, Practical exercise (PR),	Participation in the practical exercise	Examination type: Project work (Grade: 60%), and oral presentation (Grade: 40%) Length: 15-20 pages Number: 2 Language: English	3	RE	12	10%	A	N

		module (GIS)										
Module ⁴ Master's Thesis ⁵	Ma-IMES- Thesis	Completion of the second phase of the program	Begin: (4 th Sem.) Rotation: Duration: 1 Sem.		Successful completion of the first and second phases of the program	Examination type: Master's thesis and oral final examination Language: English	2/3	P	30	30%		N/S

⁴ Approval to prepare the master's thesis may also occur with the reservation that if the credits are not fully attained in the third semester but the examination requirements for module examinations of the third semester are satisfied. Approval subject to such reservation expires if a module examination of the third semester has not been finally passed. Applications for approval to prepare the master's thesis and for the oral final examination must be submitted in writing to the examination committee.

⁵ The Master's Thesis module consists of the master's thesis and the oral final examination on the master's thesis. Preparation should take into consideration both social and natural-science aspects of the topic. The master's thesis is weighted with 24 credits and the oral defense with 6 credits. Both components of the Master's Thesis module are each assessed with an individual grade and comprise the final grade of the module in a 4 to 1 proportion.