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Examination Regulations
for the postgraduate Master's Course
Computational Design and Construction
at the Hochschule Ostwestfalen-Lippe
University of Applied Sciences
(MPO MCDC)

of 29 June 2012

**Examination Regulations
for the postgraduate Master's Course
Computational Design and Construction
at the Hochschule Ostwestfalen-Lippe
University of Applied Sciences
(MPO MCDC)**

as of 29 June 2012

Pursuant to Article 2 Paragraph 4 and Article 64 Paragraph 1 of the North Rhine-Westphalia Higher Education Act (Hochschulgesetz – HG) of October 31, 2006 (GV. NRW p. 474), last amended by the Act of 31 January 2006 (GV. NRW p. 81) the University of Applied Sciences Ostwestfalen-Lippe has decreed the following examination regulations for the Master's course:

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I. General Provisions

Section 1

Goal of the program and purpose of the Master's examination

- (1) The postgraduate Master's Course **Computational Design and Construction** is an advanced Master's degree course pursuant to section 62 HG (Higher education Act).
- (2) The aim of the program is to enable students who already hold a first professional degree to acquire in-depth qualified scientific knowledge and approaches of artistic, creative as well as technical and methodical kind. The objective is to teach students to further develop these skills independently and responsibly to enable them to solve complex problems in research and development as well as in practice in a scientific manner using qualified knowledge of design and construction as well as specialist and methodological skills.
- (3) The Master's program will enable graduates in particular to independently work in scientific research and development and to proceed to a doctoral program. In addition, successful graduation will open the way towards a career in the higher grades of the public service.
- (4) The Master's examination shall establish whether the candidate has acquired in-depth, qualified, scientific knowledge and understanding of technical and methodological approaches of design and construction and is able to independently solve complex problems based on scientific knowledge and methods.

Section 2

Master's Degree

After successfully passing the Master's examination, the academic degree

"Master of Engineering", abbreviated to "M.Eng."

will be awarded.

Section 3

Admission requirements, status

- (1) The admission requirements for the advanced study program
Computational Design and Construction

are as follows:

1. Qualification to attend a technical university (Fachhochschulreife) or equivalent recognized qualification and

2. proof of a Bachelor or Diploma examination, in exceptional cases also proof of other examinations of study programs with substantial engineering focus of a standard period of study of at least six semesters will be accepted.
 3. proof of usually at least one year professional experience in the field of building and construction or engineering relevant to the advanced Master's program in Computational Design and Construction and
 4. proof of special, i.e. technical and methodological aptitude for the postgraduate Master's program in Computational Design and Construction.
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- (2) A particular entrance requirement is proof of 210 credit points. Of those at least 180 have to be gained before taking up the course of studies. The missing points have to have been gained at the latest when applying for admittance to the Master's thesis. Exceptions can only be granted by the examination board.
 - (3) The missing number of credit points can be gained by recognition of additional achievements in Bachelor and/or Master's programs or other equivalent university programs. Additionally, relevant professionally acquired skills and competences may be recognized. The examination board will decide about equivalence and allocation of credit points.
 - (4) The required suitability pursuant to paragraph 1 sentence 4 will be established in accordance with the "Regulations to establishing suitability for the postgraduate Master's program *Computational Design and Construction* at the Hochschule Ostwestfalen-Lippe (E- FO MCDC)", which are issued as statute.
 - (5) The examination board will decide whether the requirements are met in accordance with paragraph 1 sentences two and three.
 - (6) Should the number of qualified applicants be greater than the number of available places, the examination board will decide on admittance to the program, according to the following criteria: Overall score for suitability in line with the regulations of the EFO MCDC, final grades of the first degree as well as the quality of relevant professional experience and possible further and additional training.
 - (7) Students admitted to the postgraduate Master's program *Computational Design and Construction* will be given a status in line with the stipulations of section 62 HG or section 48 (7) respectively; the university will supply full particulars before the start of the program. Irrespective of the latter, persons accepted in the Master's program *Computational Design and Construction* will be referred to as students in these examination regulations.

Section 4

Standard period of study, study load, locations, cooperating partners/industry partners

- (1) The standard period of study including the Master's examination will be three semesters.
- (2) The course load will be 50 periods per semester week of mandatory and elective subjects. Ninety credit points have to be achieved including the Master's thesis and the associated colloquium. Before gaining a Master's degree, a total of 300 credit points have to be earned, these include the points gained for the first professional degree and additional recognizable achievements.
- (3) The place of study will be Detmold. With prior notice by the Hochschule Ostwestfalen-Lippe, lectures and examinations can also take place at other locations, in particular at the premises of industry partners or other affiliated universities.

Section 5

Program structure, structure of examinations and deadlines

- (1) The program consists of classroom-based classes and phases and independent learning phases which alternate. Students will be given study materials for the independent study phases. Classroom-based classes are usually taught as block seminars. More particulars will be announced before course enrolment or before the individual semesters.
- (2) A Master's degree will conclude the study program. The Master's examination consists of examinations during the course of studies and a final examination which is made up of the Master's thesis and a colloquium.
- (3) The program and the examination procedures shall be designed in a way that allows the conclusion of studies and assessments at the end of three semesters. Candidates must therefore be informed in good time of the kind and number of examinations they will have to sit as well as of relevant deadlines and they need to be informed when the Master's thesis will be set and when the same will have to be submitted.
- (4) The registration for the concluding part of the Master's examination (application for admission to the Master's thesis) should usually be made at the beginning of the third semester.

Section 6

Board of Examiners

- (1) The competent department will establish the board of examiners for the organization of the examinations and the assignments detailed by these examination regulations. The board of examiners is made up of the chairperson, the deputy and three additional members. The chairperson, deputy and one additional member will be elected from the group of professors; one member will be elected from the academic staff and one member from among the students. For all board members deputies will also be elected except for the chairperson and the deputy chairperson, in the same manner. The student member will be elected for a term of one year; the other members will serve for a term of four years. Reelection is permitted.

- (2) The Board of Examiners is an official body as outlined by administrative procedural law and the code of administrative practice.
- (3) The Board of Examiners shall ensure that regulations as set out in the examinations regulations are adhered to and sees to the proper implementation of the examinations. In particular the Board is responsible for decisions related to appeals against decisions made in the examination process. The Board will report at least once a year to the department on the development of examinations and the duration of the program. This report shall be disclosed by the university in an appropriate manner. The Board will make suggestions for reforms of the examinations regulations and the curriculum. The Examination Board may transfer the performance of its duties as a rule to the chairperson, this does not apply, however, where decisions about appeals are concerned.
- (4) The Board of Examiners shall have a quorum when at least one further member with voting power, in addition to the chairperson or his deputy and a further professor, are present. The Board of Examiners shall vote with simple majority. In the event of a tied vote, the vote of the chairperson will decide. The student member of the Examination Board will not be involved in decisions of a pedagogical scientific nature especially those concerning recognition or other evaluations of academic achievements and examination results nor in the appointment of examiners and assessors. The student member of the Examination Board does not take part in consultation and adoption of resolutions on matters which concern the determination of examination tasks or of their own examination.
- (5) The members of the Examination Board have the right to sit in on the examination with the exception of the student member who wants to take the same examination on the same day.
- (6) The meetings of the Examination Board are non-public. The members of the Examination Board and their deputies are subject to the obligation of professional secrecy. If they are not employed in the public service, they are to be pledged to secrecy by the chairperson of the examination board.
- (7) Any detrimental decisions by the Examination Board or its chairperson are to be communicated to the candidate without delay. The candidate is to be given the opportunity for a prior fair hearing. Section 2 (3), sentence 3 of the Administrative Procedure Act (VwVfG) for the federal state of North Rhine-Westphalia, in particular concerning the exception of a hearing and the duty to give reasons for the assessment of academic or artistic works, shall remain unaffected.

Section 7

Examiners and Observers

- (1) The Examination Board shall appoint the examiners and the observers. The Board may transfer the task of appointing to the chairperson. Only persons who have at least passed the relevant Master's examination or hold a comparable qualification may be appointed as examiners, and except where compelling reasons call for a deviation from the ruling, examiners should also have relevant teaching experience in the field to be examined; if several examiners are to be appointed, at least one of them should have been teaching in the relevant field. As observers may only those be appointed that have earned the relevant Master's degree or an equivalent degree or qualification.
- (2) The examiners are independent in their activity as examiners.
- (3) The Examination Board ensures that the examination load is fairly evenly distributed among the examiners.
- (4) The chairperson of the examination board ensures that the exam candidates are informed of the names of the examiners at least two weeks prior to the relevant examination date.
- (5) Section 6 (6) sentences 2 and 3 shall apply correspondingly to examiners and observers.

Section 8

Recognition of academic study periods, academic achievements and examination results; admission to a higher semester.

- (1) Study and examination results of the same or a comparable study program at a state or state recognized university within the area of application of the German Basic Law will be officially recognized.
- (2) Study and examination results of other study programs will be recognized once their equivalence has been determined. The equivalence is established if content, scope and requirements are essentially equivalent to those of the program which the recognition has been applied for and no substantial differences have been found. The comparison should not be made schematically but under the aspects of an overall evaluation and assessment.
- (3) The competent examination board will decide about recognition and grading to allow admission to a higher semester, in accordance with paragraphs 1 to 3. In case of doubt the examination board will decide after consultation with the competent examiners.

- (4) When academic achievements and exam results are recognized, provided the grading systems are comparable, grades will be absorbed and integrated in the calculation of the final grade. If the grading systems are incompatible, a “pass” mark will be awarded
- (5) Previous academic achievements and exam results will only be recognized after the student has submitted an application in writing supported by the relevant documents. Such documents must contain evidence of past academic achievement and exam results as well as of other knowledge and qualifications that are to be recognized. Recognition of academic achievement gained from study programs requires as a rule the submission of the examination rules of the study course, the module description as well as the individual transcript of records or a comparable document.
- (6) Any failed attempt will reduce the maximum number of allowed retakes by the number of unsuccessful attempts, in accordance with section 10.
- .
- (7) In cases where students enrolled in another course of study at the Hochschule Ostwestfalen-Lippe and in a course of study of this examination regulation make an attempt at examination in a subject that has the same classification number in this and in the examination regulation of the other course the achievement will be officially credited to both subjects. Attempts as well as fail attempts in such subjects will count as attempts and reduce the number of possible attempts; this also applies to additional subjects. Sentences 1 and 2 apply accordingly, if a student is enrolled in several other study courses as well as a course of this examination order.

Section 9

Assessment of examination achievements, credits and ECTS-points

- (1) Grades for the individual examinations (subject grades) will be determined by the respective examiners.

Grades will be given in accordance with the following grading system:

1.0	=	very good	=	an outstanding performance
2.0	=	good	=	a performance well above average
3.0	=	satisfactory	=	an average performance
4.0	=	sufficient	=	a performance that in spite of notable errors still meets the standard
5.0	=	deficient	=	performance that does not meet the standard because of substantial errors

For a more refined assessment of exam results, the following intermediate values may be used: 1.3; 1.7; 2.3; 2.7; 3.3 and 3.7

(2) In order to pass an examination, the subject grade has to be at least "sufficient" (4.0)

(3) If several examiners are involved in an examination, they will evaluate the entire examination together, unless otherwise provided in this examination regulation. If the examiners cannot agree on the assessment, the grade shall be formed from the arithmetical mean of the individual assessments.

(4) When forming grades from intermediate values, an arithmetical value is derived

up to 1.5	the grade "very good"
above 1.5 up to 2.5	the "good"
above 2.5 up to 3.5	grade "satisfactory"
above 3.5 up to 4.0	the grade "sufficient"
above 4.0	the grade "deficient"

(5) Only the first digit after the decimal point will be counted, the others will be deleted without rounding.

(6) Students are to be informed of the results of course-based examinations after four weeks at the latest, other regulations pursuant to this examination regulation remain unaffected. The assessment of the Master's thesis will be announced after four weeks at the latest.

(7) Credit points (CR) will be awarded for every examination during the course of studies that was graded with at least "sufficient", in accordance with the regulations of appendix 1. Credits awarded in accordance with this examination regulation correspond to ECTS points.

Section 10

Examination retakes

(1) Examinations graded with at least "sufficient" (4.0) cannot be retaken.

(2) Examinations during the course of studies that haven't been passed or that counted as not passed cannot be retaken more than twice.

- (3) A failed Master's thesis or one that counts as failed can be retaken once. The same applies to a colloquium on the Master's thesis

Section 11

Non-compliance, withdrawal, deception, infringement of good order

- (1) An examination is considered "deficient" (5.0), if the candidate misses an examination date without good cause or if he or she withdraws from the examination after the start without good cause. The same applies if he or she does not submit a written work for grading within the stipulated timeframe.
- (2) If there are reasons for withdrawal or non-compliance with regulations, those have to be immediately submitted in writing and be made credible to the board of examiners. In the case of illness a doctor's note has to be presented. The chairman of the examination board may, in individual cases, request a certificate issued by an independent medical practitioner. Should the board accept the reasons for non-compliance, the candidate will be informed in writing.
- (3) Should a candidate attempt to influence the result of an examination by deception e.g. by using unpermitted aids, this will result in a score of "insufficient" (5.0) for the respective exam; the examiner or the invigilator in charge will determine a deception and will record the fact. A student who disorderly disrupts the exam can be disqualified from this examination, usually after a warning by the examiners or the invigilator; the respective exam results are assessed as "insufficient" (5.0); the reasons for the disqualification will be recorded. In very serious cases, the examination board may disqualify the candidate from taking part in any further examinations.
- (4) Within 14 days following such an announcement, the candidate may request that the decision be reviewed by the examination board, in accordance with article 3 (1) and (2).
- (5) The candidate is to be informed immediately in writing of any detrimental decision made by the examination board, stating the reasons and advising him of his legal rights.

II. Examinations during the course of studies

Section 12

Aim, scope and procedure of exams during the course of studies

- (1) The aim of examinations during the course of studies is to ascertain whether the candidate masters the contents and methods of the examination subjects in their fundamental contexts and can independently apply acquired knowledge and skills.
- (2) The examination requirements are to be oriented towards the materials of the course unit and the classroom teaching intended for the respective course.
- (3) Form and extend of examinations during the course of studies are defined in sections 15 to 18. The examination board shall stipulate in a binding manner the type of examination, generally at least four weeks before an examination date, in agreement with the examiners for all candidates of the respective examination.

Section 13

Admission to examinations during the course of studies

- (1) Only those candidates can be admitted to an examination during the course of study who
 1. meet the prerequisites for examinations according to Section 3 (1) (2) and (4);
 2. have been admitted at Hochschule Ostwestfalen-Lippe to the postgraduate Master's course Computational Design and Construction;
 3. has, if necessary, satisfied the admission requirements provided in these examination regulations for the respective examination during the course of study or will have done by a date set by the examination board.
- (2) Electives may be changed; this also applies when an elective was not passed in a final or does not count as passed in a final. Changes pursuant to sentence 1 are only allowed up to admission to the colloquium.
- 3) The application for admission to an examination is to be made in writing by the date stipulated by the examination board. Applications to all examinations that a candidate intends to take during the course of studies and in the same

examination period are to be made at the same time.

- (4) With the application for admission the following documents must be enclosed or have to be submitted by the date set by the examination board in so far as they have not been submitted at an earlier date:

1. the prerequisites stated in paragraph 1;
2. a declaration of previous attempts at taking respective examination and pass a Master's examination and a preliminary and interim examination of the same study program;
3. a declaration whether the candidate objects to the presence of any additional person sitting in on the oral examination;

In cases where the candidate cannot enclose the prerequisites in the manner stated in paragraph 1, the board of examiners may permit to supply proof by other means.

- (5) Applications for admission to an examination during the course of studies may be withdrawn in writing to the chairperson of the examination board up to seven days before the examination at the latest; this will not count towards the permissible number of examination attempts.
- (6) The chairperson of the examination board and, in case of doubt, the examination board shall decide on the admission to the examination.
- (7) Admission to the examination is to be refused if
- a) the prerequisites given in paragraph 1 are not met or
 - b) the documents are incomplete and are not submitted by the date stipulated by the examination board or
 - c) the candidate has not passed a respective final examination or within the area of application of the German Basic Law has not passed a Master's examination or a respective or preliminary or intermediate examination in a final manner of the same course of study.

In addition, admission may only be refused if the candidate within the area of application of the German Basic Law has lost his right to be examined in the same course of studies by missing the deadlines for a repeat.

Section 14

Examination procedure during the course of studies

- (1) The examination dates shall be determined by the examination board and notified to the candidates in good time. Examinations during the course of studies may take place following or during classroom periods.
- (2) The examination board determines the examination dates and notifies the candidates in good time, generally at least four weeks before the examination in question.
- (3) The candidate must, at the request of the examiner or invigilator, furnish proof of his/her identity by an official identity document.

Section 14a

Students with special requirements

- (1) If a candidate proves by a medical certificate or in another manner credibly that due to disability he/she is not in a position to take the examination in the scheduled form in whole or in part, the chairperson of the examination board can permit equivalent examination performances to be rendered in another form. The chairperson must ensure that by adapting the examination conditions any discrimination against students with disabilities is ruled out, as far as possible. In case of doubt, the chairperson may demand further proof of the disability.
- (2) For students to whom the conditions for maternity protection apply pursuant to sections 3, 4, 6 and 8 of the Maternity Protection Act or the deadlines stipulated by the federal law on child benefits on parental leave are affected, the examination board will determine the examination conditions, on application by the student concerned, on a case-by-case basis.
- (3) For students who take care of or nurse their spouse, registered partner or a direct relative or direct in-law, in those cases when those need care, the examination board will determine deadlines and dates, on application of the student concerned, taking lost time due to nursing or care-taking into consideration on a case-by-case basis.

Section 15

Examination and E-examination

- (1) The examination is in the form of a written examination and takes place under invigilation. The examiner will decide on the admission of aids.

- (2) Examinations may also be undertaken by including the use of multi-media (so-called e-examinations). They consist of free text tasks, cloze texts and/or matching tasks. Multiple choice tasks are permissible on the conditions of section 15a. Before using multi-media-supported examinations it must be ensured that electronic data can be clearly identified and permanently and unmistakably attributed to the examinee.
- (4) The examination question of a written examination is generally only set by one examiner. Multimedia-supported examination tasks are generally set by two examiners.
- (5) Written examinations must be evaluated by two examiners. In justified cases the examination board may deviate from this rule, the reasons have to be recorded.
- (6) Where the examination includes multiple-choice tasks, the examination will be assessed in line with section 15a chapters 4 to 7. The further chapters of section 16 apply for the multiple-choice part correspondingly.

Section 15 a **Multiple-choice tests**

- (1) Examinations may also be set up as multiple choice tests. In this case examinees have to answer questions by marking the correct answer or answers respectively from a choice of possible answers.
- (2) Questions and the possible answers will be set by at least two examiners. Examiners will record in writing which possible answers will be recognized as correct choices, how many points will be awarded for each question and how many points can be reached in total.
- (3) Examinees are to be advised of the modalities of the tasks, the total number of points attainable, as well as the points for each correct answer.
- (4) The examination performance is deemed a pass if the examinee reaches at least 50% of the maximal points achievable (absolute pass mark) or if the number of points reached by an examinee does not go more than 15% below the mean number of points reached by examinees of the reference group (relative pass mark). The respective reference group is those examinees who have taken part in the actual examination. If the examination is taken together with examinees of different courses of studies, all examinees together will be the reference group. The relative pass mark is only to be considered if it lies below the absolute pass mark.

(5) The examination performance is to be evaluated as follows:

If the examinee has reached the minimum number of points for a pass, in accordance with chapter 4, her/his grade will be as follows:

1.0	if additionally at least 90 %
1.3	if additionally at least 80, but less than 90%
1.7	if additionally at least 70, but less than 80%
2.0	if additionally at least 60, but less than 70%
2.3	if additionally at least 50, but less than 60%
2.7	if additionally at least 40, but less than 50%
3.0	if additionally at least 30, but less than 40%
3.3	if additionally at least 20, but less than 30%
3.7	if additionally at least 10, but less than 20%
4.0	if no or less than 10%

of points, above the minimum number of possible points, have been reached.

(6) In determining the examination result in accordance with chapter 4, and the performance evaluation pursuant to chapter 5, fractional values will be rounded in favour of the examinee.

(7) In the determination of the results, the following details are to be given:

1. the total number of possible points and the number of points reached by the student;
2. the minimum number of points necessary to reach an absolute pass grade as well as the average number of points reached by the reference group and the number of points required to reach the relative pass grade;
3. in the case of a pass, the percentage rate by which the number of points reached surpass the minimum number of points;
4. the candidate's attained grade.

(8) When determining the examination results, the examiners will pay attention to noticeable numbers of wrong answers which may indicate that a particular examination question was wrongly worded. Should it become apparent after an examination that certain questions or answer options were inappropriate, than the relevant examination question will be considered as not having been asked.

- (9) The total number of points achievable will be reduced accordingly and will be the basis for calculating the examination result. The examination board has to be informed. The same might then check the assessment procedure and reach a binding decision on whether individual examination questions can be deemed to have been asked or not. The reduced number of questions or points must not affect the candidate negatively.

The multiple-choice option may also be carried out in multi-media-assisted form.

- (10) For everything else section 15 applies.

Section 16

Oral examination

(1) Oral examinations are usually taken in front of an examiner in the presence of an expert observer or several examiners (examination before a panel of examiners) as group examinations or individual examinations. Each candidate will be questioned in each subject by one examiner only. The time allotted for each oral examination is 30 to 35 minutes per candidate. Before deciding on the grade, the examiner will hear the observer; several examiners will consult with each other.

(2) The essential matters and the results of the examination, in particular those matters relevant for the grades are to be recorded. The candidate will be informed of the examination result immediately after the oral exam.

(3) Those students, that plan to sit the same examination at a later examination period, will be admitted to sit in on the exam if space allows and if the candidate did not object to this when registering for the examination. This admission does not include the consultation and the announcement of the results.

Section 17

Presentation

(1) When the examination format is a presentation, a task relevant to the respective subject has to be solved independently; both the approach and the results are to be presented orally. The concept of the presentation is to be handed to the examiner before the start of the presentation in writing. The time spent on preparing the presentation will be at least four weeks. Presentation time will be 20 to 25 minutes per candidate. During the presentation, the candidate will only be asked questions relevant to clarifying the approach and results. Only the content and the methodology of the presentation will be assessed, including the answers to clarifying questions. Admitted

to sit in are students in the same semester of the Master's Program Computational Design and Construction; the candidate has no exclusion rights. Others are only admitted to sit in if the candidate does not object. Admission does not include the consultation and the announcement of the results.

(2) The examination task will be set by the competent teacher and will be handed to the candidate after approval by the examination board in writing or by posted notice.

(3) Section 16 shall apply mutatis mutandis. If the presentation concept is given to the examinee in written form, it is to be attached to the written record.

Section 18

Composition with presentation

(1) An "composition-with-presentation" form of exam requires independent solving of an examination task relevant to the respective study subject. Depending on the task, a draft, a model, a workpiece, a written or digitally presented composition, or a combination of forms is permitted. The examination directions shall include information on the expected scope of the composition. The preparation time of the composition is expected to be at least four weeks.

(2) After approval by the examination board, the competent teacher will hand the examination instructions to the students, or post the same to the notice board. The instructions will include the expected results, the place where the composition has to be handed in, and advice that the composition has to be handed in within the deadline set by the examination board at the time of registration for the exam.

(3) The composition has to be handed in at the time of registering for the presentation, at the place indicated in the written instruction. The time of submission shall be recorded. When using a mail service, the date and time of posting will be decisive. At the time of handing in the assignment, the candidate will confirm in writing that he or she has completed the assignment independently and that no sources or aids were used aside those cited. Where group work is concerned, the same applies to the part contributed by the candidate.

(4) The composition will be followed by a presentation of 20 to 25 minutes per examinee. During the presentation examiners may only ask clarifying questions about the approach and results. Composition and presentation will be assessed as one unit.

(5) The examination board will determine the dates for the presentations after consulting with the examiner and will notify the candidates in good time, generally at least two weeks in advance.

(6) Presentations are usually held in front of the two examiners and listeners. Only the examiners are permitted to ask questions to clarify the approach and results. Only the content and the methodology of the presentation and responses to clarifying questions will be assessed. Admitted to sit in are students in the same semester of the Master's Program Computational Design and Construction; the candidate has no exclusion rights; additional listeners can be admitted if the examinee has no objections. The admission does not include consultation.

(7) Section 15 paragraph 3 shall apply correspondingly. In all other respects section 16 shall apply to the presentation.

Section 19

Examinations during the course of studies for the Master's Examination

(1) In the postgraduate Master's course Computational Design and Construction 62 credit points are to be gained, shown on the list of compulsory subject in appendix 1.

(2) In addition, four credit points are to be gained by examinations in one subject from group 1 "electives group 1" – planning, and another 4 points by examination in a subject of group 2 – Technology (Appendix 2). Provided the number of required credit points was gained or exceeded, further subjects in which credit points are earned will count as "additional subjects." Paragraph 13 (2) shall remain unaffected.

(3) The elective subjects offered per semester (appendix 2) will depend on the prevailing situation and the decision of the examination board and students will be notified in good time. In cases where less than three students should register for an elective subject, the subject might be withdrawn for that semester.

Section 20

Master's Thesis

(1) The Master's thesis is designed to show that the candidate is capable of independently completing a complex task from his/her subject field within a set period of time, including all professional details and interdisciplinary interrelations. He will prove in particular that he is capable of applying scientific methods also in terms of construction and design. The Master's thesis is generally an independent project with a set of tasks that requires subject specific knowledge, an appropriate technical methodological approach as well as planning and organizational skills. Depending on the task, a drawing, a model, a workpiece, a digital or written Composition, is to be

produced. The Master's thesis may also be of a theoretical nature and specialist content.

(2) The Master's thesis will be set and supervised by an examiner appointed by the examination board, in accordance with section 7 (1). The candidate is to be given the opportunity to make suggestions for the topic of the thesis.

(3) On application, the chairman of the examination board shall ensure that the candidate receives a topic for the thesis in good time.

(4) The Master thesis can also be admitted in the form of group work.

In exceptional cases, the Master's thesis may be composed in English.

(5) The chairman of the examination board and, in case of doubt, the examination board shall decide on the admission. Admission is to be refused if

- a) the prerequisites stated in paragraph 1 are not met or
- b) the documents are incomplete or
- c) the candidate has not passed within the area of the German Basis Law in a final and non-appealable manner a corresponding Master's thesis or an examination given in paragraph 2 (2).

These stipulations apart, admission may only be refused if the candidate within the area of the German Basis Law has lost his/her right for examination in the same course of study due to missing the deadline for repeating the examination.

Section 21

Admission to the Master's thesis

(1) Candidates can only be admitted to the Master's thesis if they

1. meet the prerequisites for admission during the course of studies in accordance with section 13 (1) sentences 1 and 2;
2. have passed all examinations during the postgraduate Master's course of study in Computational Design and Construction and
3. have supplied proof of 210 Credit points, a particular admission requirement of the Master's degree course pursuant to section 3, paragraphs 2 and 3;

(2) The application for admission is to be made in writing to the chairperson of the examination board. The following supporting documents are to be attached, if they have not been supplied earlier:

- 1) Evidence of the prerequisites mentioned in paragraph 1,
- 2) A declaration on previous attempts at completing a Master's thesis or passing a Master's thesis and possibly a pre- or intermediate examination in the same course of study.

The application is to include a statement on which examiner is prepared to set and supervise the Master's thesis.

(3) The application for admission can be withdrawn in writing until notification of the decision on the application, without counting towards the number of possible examination attempts.

Section 22

Setting of the topic and production of the Master's thesis

(1) The topic will be set by the person supervising the Master's thesis and will be handed out by the chairperson of the examination board. The day when the candidate is notified of the examination topic shall be deemed the day of the setting of the topic. The point of time is to be recorded in writing.

(2) The completion period for the thesis shall be four months as the most. The topic, task and scope of the Master's thesis are to be limited by the supervisor in such a way that the thesis can be completed within the set period. In exceptional cases, such as illness, the chairperson of the examination board may extend the completion period for up to four weeks if the candidate has made such an application before the end of the deadline. The supervisor is to be heard with regard to this application.

(3) The topic of the Master's thesis can only be rejected once and this only within the first four weeks of the completion period without giving reasons. In the case of a repeat attempt, pursuant to section 10 (3), the rejection is only permissible if the candidate did not make use of this option when completing his first Master's thesis.

(4) Section 14a shall apply in all other respects.

Section 23

Submission and assessment of the thesis

(1) The thesis is to be submitted within the stipulated time to the chairperson of the examination board. The time of the submission is to be placed on record; if using a postal service the time of posting will be authoritative. When submitting the thesis, the candidate will confirm in writing that he or she produced their work, in the case of group work their share of the work, independently without using any aids or sources other than those listed and referred to in quotations. If the thesis is not submitted within the stipulated period, it will be marked as insufficient (5), pursuant section 11 (1) sentence 2.

(2) The Master's thesis will be examined and assessed by two examiners, one of them shall be the candidate's supervisor. The second examiner will be appointed by the examination board. Individual assessment are to be made in accordance with section 9 (1) and justified in writing. The grade of the thesis shall be formed from the arithmetical mean of the individual assessment, provided the difference between grades is no more than 2.0. If the difference is more than 2, a third person will be appointed by the examination board to examine the thesis. The Master's thesis can then, however, only be evaluated as "fair" or better, if at least two of the grades are "fair" or better.

(3) For the Master's thesis 15 credit points will be awarded.

Section 24

Colloquium

- (1) The Colloquium complements the Master's thesis, and is to be assessed independently. It serves to ascertain whether the candidate is able to orally express the results of his thesis, the subject-related basis and the wider interdisciplinary contexts and the practical significance. The treatment of the thesis topic is also to be discussed with the candidate.
- (2) The Colloquium shall take place within four weeks after the announcement of the assessment of the Master's thesis.
- (3) Candidates can only be admitted to the colloquium
 1. if they meet the prerequisites stated in section 21(1) for admission to the Master's thesis and
 2. if their Master's thesis has been graded at least as "fair"

The application for admission is to be sent to the chairperson of the examination board. Proof of the admission prerequisites in accordance with sentence 1, is to be attached if not yet provided, as well as a declaration about previous attempts at passing similar examinations and a statement to whether the candidate objects to the admission of listeners. The candidate may also apply for admission to the colloquium at the time of registering for the Master's thesis, in this case admission will be granted, as soon as the required proof and documents have been presented to the examination board. For the admission to colloquium or its refusal section 21 (4) will apply in all other respects.

- (4) The colloquium is held as an oral examination and is jointly conducted and assessed by the examiners of the thesis. In case section 23 (2) sentence 6 should apply, the colloquium will be conducted by those examiners whose individual assessments formed the grade of the Master's thesis. The colloquium will take about 30 minutes per candidate. In other respects the regulations valid for oral examinations (section 16) shall apply to the holding of the colloquium.
- (5) Five points shall be awarded for passing the colloquium.

Section 25

Result of the Master's examination

- (1) The Master's examination in the postgraduate Master's course *Computational Design and Construction* has been passed, if
 1. in the compulsory subjects, according to section 19(1) 62 credit points and

2. according to section 19(2) in an elective subject of electives group 1 – planning and in an elective subject of group 2 – technology – 4 credit points each and
 3. with the Master’s thesis 15 credit points and with the colloquium 5 credit points have been gained.
- (2) The Master examination in the postgraduate Master’s course *Computational Design and Construction* has not been passed, if
- a) one of the compulsory subjects has been assessed as , or is deemed as “not sufficient” in accordance with appendix 1 or
 - b) it is no longer possible to gain 8 credit points from the elective subjects, according to section 19 (2) or
 - c) the Master’s thesis or the colloquium were assessed as “not sufficient” in a final manner.
- (3) The report regarding a failed Master’s thesis will bear information about available legal remedies. Upon request, the chairperson of the examination board will furnish a report, after the removal from the register of students, showing the examination performance, the grades and credit points achieved as well as the number of points still required for a pass grade. The report must indicate that the candidate has failed the Master’s examination. Upon request the chairperson of the examination board will issue a note that shows only the examination achievements, their assessment and the number of credit points earned.

Section 26

Certificate, average grade, ECTS-final grade

- (1) A certificate will be issued on the passed Master’s examination without delay, if possible within four weeks. The certificate contains a list of all course units and their grades, the topic and the grade of the Master’s thesis, the grade achieved in the colloquium as well as the average grade of the Master’s examination. The grade will be indicated in words followed in brackets by the grade in figures, with first decimal point. Each examination result will also show the number of credit points gained. The total number of credit points achieved in the above examination will be indicated.
- (2) The average grade of the Masters examination is formed from the arithmetical mean of the individual grades, weighed with the credit point value of the module, the Master’s thesis and the colloquium, according to section 9 (4) and (5).

(3) The certificate is to be signed by the chairperson of the examination board. The certificate will bear the date of the day on which the last examination took place.

(4) In addition an appendix to the certificate will show a relative ECTS final grade in accordance with the following evaluation scale:

A	for the best	10%
B	for the next	25%
c	for the next	30%
D	for the next	25%
E	for the next	10%

The total grade will be considered with two decimal points and in connection with the ECTS final grade reported accordingly, further decimal points will be discounted without rounding.

(5) Reference for the calculation of the relative ECTS final grade will be the graduates of the last six previous semesters. If thus the number of 60 persons is not reached, more previous semesters are to be included until 60 persons are included; final semesters are always counted in total.

(6) Should the course of study in question not have reached six graduating semesters yet and or not 60 graduates, the relative ECTS final grade will only be indicated on request. In this case graduates of other similar study courses will be taken as reference, in accordance with paragraph 5, either completely or by way of compliment. Further details will be decided by the examination board; their decision will be put on record. In the case that the reference will be formed in accordance with the directives given in this paragraph, the fact is to be added as explanation.

Section 27

Diploma Supplement

- (1) The candidates will receive together with the certificate of the Master's examination the diploma supplement together with a transcript of records.
- (2) The Diploma Supplement will indicate the course of study, the prerequisites and the content of the course, the grading system and the nature of the academic degree; additionally it will contain information on the university and the German tertiary system.
- (3) The Transcript of Records shows details of the contents of those subjects and modules that were examined as well as the credit points gained.

Section 28

The Master's Certificate

- (1) The candidate will receive his/her Master's Certificate at the latest at the time of the examination reports showing the dates and indicating the study course. On the Master's Certificate the award of the academic degree will be confirmed pursuant to section 2 hereof.
- (2) The Master's Certificate will be signed by the president and the chairperson of the examination board and bear the seal of the Hochschule Ostwestfalen-Lippe, University of Applied Sciences.

Section 29

Additional Subjects

- (1) As "examination in additional subjects" will count those examinations that a student chooses and passes from a catalogue of electives offered as part of the Master's degree course *Computational Design and Construction* through an examinations and that go beyond the number of examinations required. The examinations taken first will count as examinations in compulsory and elective subjects unless the student has determined otherwise before the first attempt at the examination or in an admissible manner later. Provided the number of required credits has been gained from the list of compulsory and elective subjects, any additional subjects out of this list in which credits are earned will count as additional subjects; section 13 (2) shall remain unaffected.
- (2) The admission requirements for additional examination in accordance with paragraph 1 arise from section 13.
- (3) The results of examinations in additional subjects as well as the number of thus acquired credit points will be entered in the examination report on request, they will not, however, count when determining the overall grade and the total number of credit points.

**III. Invalidity of examinations, Revocation of the Master's Degree,
Inspection of examination files.**

Section 30

Invalidity of Master's examination and Revocation of the Award

(1)

In cases where a candidate has cheated in an examination and this fact only comes to light after the certificates have been handed out, the examination board is entitled to change the grade given for the respective examination a posteriori and to declare the examination in part or completely as failed.

Should the prerequisites for admission to an examination not have been satisfied without the candidate's intention to cheat and this fact only becomes known after handing out the diploma certificates, this omission will be deemed remedied by the successful passing of the examination. In cases where the candidate has gained admission by intentionally deceitful means, the examination board will decide about the legal consequences, duly heeding the Administrative Procedure Act for the state of North Rhine-Westphalia.

(3) Before a final decision, the candidate concerned is to be given the chance to comment on the matter.

(4) The invalid examination report will be withdrawn and a new one issued, where appropriate. After a period of five years from issuing the examination results, a decision is ruled out, pursuant paragraphs 1 and 2 sentence 2.

(7) If the examination has been declared overall as failed, the Master's degree will be denied and the Master's diploma certificate will be withdrawn.

Section 31

Inspection of examination records

After the results of all examinations have been announced, students will be allowed inspection of their examination records in due course. The chairperson of the examination board will decide on the place and time of inspection.

V. Final Provisions

Section 32 Effective date and Publication

- (1) These examination regulations will take effect as of 1 September 2012.
- (2) These examination regulations will be published in the Bulletin of the Hochschule Ostwestfalen-Lippe /University of Applied Sciences.

These examination regulations are issued after review by the Executive Board of the University Ostwestfalen-Lippe and based on the resolution adopted by the faculty council of the Department of Architecture and Interior Design on 23 March 2011 as well as consent given by Dean of the Department Council for Architecture and Interior Design issued on 27 June 2012.

Lemgo, 29 Juni 2012

The President
of Hochschule Ostwestfalen-Lippe
University of Applied Sciences



(Dr. Oliver Herrmann)

