



Faculty of Process and Systems Engineering

Examination Regulations

Master of Science (M. Sc.) Programme

Chemical and Energy Engineering

Published on November 25th, 2013

For legal purposes the German “Prüfungsordnung für den Masterstudiengang Chemical and Energy Engineering” is binding, which was enacted by the Academic Senate of the University on October 23, 2013.

§ 1

Scope of Application

(1) These Examination Regulations regulate examinations and degree of the Master Programme

Chemical and Energy Engineering

at the Faculty of Process and Systems Engineering of the Otto-von-Guericke-University.

(2) The programme is not intended to be consecutive. The profile is mainly research-oriented. The goal of the study and the qualifications are determined within the Study regulations.

(3) The Programme is run as a full time class attendance course.

(4) The Programme is held in English language.

§ 2

Duration and Structure

(1) The standard period of study is 4 semesters. The Master Degree comprises module examinations which are carried out during the semesters and a Master Thesis including the Colloquium.

(2) The Programme is modularly designed. Modules may consist of sub-modules. Each module requires at least one module examination. Sub-modules require an examination as well. Module examinations consist of one or more verifications. Verifications are to be assessed either during the module or at the end of the module or sub-module. Every module or sub-module that has successfully been completed gains a certain number of credits according to the European Credit Transfer System (ECTS).

(3) A successful completion of the study demands 120 credit points. It is obligatory to complete a certain number of compulsory and compulsory optional modules successfully. Furthermore students are free to choose additional optional modules. The examination schedule contains the modules, examinations, verifications, and the distribution of the Credits (see annex).

(4) The Programme is designed to give students the possibility to finish the study within the standard time period. If a student submits all required activity confirmations, the module examination can also be taken earlier than scheduled. If a student exceeds the standard time period of the study for more than 2 semesters the Master Degree is graded as “failed”. This regulation does not apply in case the exceedance is not under responsibility of the student.

(5) Each examination must be taken for the first time during the examination period that follows the semester in which the module has been completed. Not taken examinations after this deadline are considered to be “failed” for the first time. This regulation does not apply in case the exceedance is not under responsibility of the student.

§ 3 Academic Degree

After the successfully completed examinations, the degree „Master of Science” (M. Sc.) is awarded by the Otto-von-Guericke-University.

§ 4 Admission

(1) The admission for the Master Programme requires the successful completion of a corresponding bachelor programme.

(2) If they are particularly capable, graduates of a bachelor programme which is professionally similar can also be admitted under special conditions. The decision on this is up to the examination board.

(3) Bachelor graduates who completed modules of at least 30 CP and a Bachelor thesis with the grading “good” or better, are qualified to do the Master Programme.

(4) The examination board decides on the admission of graduates from related disciplines. It may set conditions, which must be usually fulfilled until the end of the first semester and should not be more than 30 CP. To pass the adjusting semester at least 15 CP are to be proved. Missing Credits can be provided during the first semester of the Master Programme. Non-performance of these conditions entails exmatriculation. The examination board decides on exceptions.

(5) Adequate command of the English language is prerequisite. Non-native speakers must pass

- ETS TOEFL – 550 (525*) points for paper based or 213 (197*) points for computer based or 80 (70*) for internet based or
- Cambridge Certificate of Proficiency in English (CPE) – grade C or
- Cambridge Certificate of Advanced English (CAE) – grade B or
- International English Language Testing System (IELTS) – overall band score 6.0 (5.5*)

In exceptional cases the lower value which is in brackets is sufficient for admission. In these cases the higher values must be evidenced at the beginning of the second semester.

(6) The examination board decides on exceptions.

(7) Admission is going to be refused, if the student failed exams definitely within the matriculated programme or a similar programme at a university or an equated institution. The same applies, if the student is passing another corresponding examination procedure.

§ 5 Examination Board

(1) In order to carry out the functions of the examination regulations an examination board is to be established. It consists of 7 members, the chairman, the associate chairman, two additional members from the group of professors, two members from the group of scientific employees, and one representative of the students.

(2) The examination board ensures the correct procedure for examinations. It observes the compliance of the examination regulations. The examination board makes suggestions to improve the examination regulations as well as the study regulations. The compliance of the standard period of study and the examination deadlines demand particular focus.

(3) Resolutions of the examination board are passed by the majority of all votes. Abstention is not permitted. In the case of equal votes decision is up to the chairman or, if he is absent, the associate chairman. The examination board is competent to pass resolutions if a majority of its members is present, whereas two members of the group of professors must be present at least.

(4) The term of the examination board members last two years, the term of the students representative is one year. A re-election is legitimate.

(5) The examination board can revocably delegate exactly identified powers for individual cases to the chairman or the associate chairman. The chairman prepares and executes the decisions of the examination board and reports continuously on his/her activities.

(6) The members of the Examination board are legitimate to be present in examinations as observers.

(7) Members of the examination board are sworn to secrecy.

§ 6 Examiners and Assessors

(1) The examination board appoints examiners and assessors. Academic examinations can be conducted by professors, junior-professors, university lecturers, research employees who are concerned with teaching, contract lecturers, and experienced persons from the professional field. Examinations are to be evaluated by persons who have at least Master Degree only.

(2) Written examinations must be evaluated by two examiners. Exceptionally the examination board can permit only one examiner for a written examination if a second examiner from the group of entitled persons is not available on the date of the examination. Students must be informed about this permission when they register for it. Pre-corrections by scientific staff are legitimate.

(3) The Master Thesis must be evaluated by two examiners.

(4) Students can suggest examiners for oral examinations and for the Master Thesis. This suggestion is not legally binding.

(5) Examiners independently evaluate examinations.

(6) The names of the examiners must be announced to the students by the examination board on time.

§ 7 Recognition of Study Times and Examinations

(1) The examination board decides on the recognition of study times and examinations on written application of the student. The application must be submitted within four weeks after the beginning of the study. Students must deliver all required original documents or certified copies.

(2) Study times and examinations which have been completed at a university within the applicability of the constitution will be recognized, if equality can be determined. Equality is given, if study times and content of study and examinations basically correspond to the requirements of the Programme at Otto-von-Guericke-University. An overall inspection and evaluation is to be carried out, not a schematic comparison. Recognition with certain conditions is legitimate.

(3) Study times and examinations which have been completed abroad will be recognized, if equality can be determined. Determination of equality of study times and content of study and examinations completed at foreign universities is based on the equivalence agreement of the education committee and the university rector conference and on the arrangements within academic partnerships.

(4) For the recognition of examination results ECTS grades are to be adopted and recorded on the certificate. ECTS grades are not taken into account for the calculation of the final grade.

(5) If the system of evaluation is comparable, grades are adopted and taken into account for calculation of the final grade.

§ 8

Types of Examinations / Safeguarding Provisions, Compensation of Disadvantages

(1) Types of examinations are:

1. written examination (test papers)
2. oral examination
3. scientific projects
4. presentations

(2) Within a written examination the student must prove his/her ability to use common methods to detect and solve problems of a scientific field within a limited timeframe and with limited aids. Written examinations take place under supervision. The processing time is 60 minutes at least, but not more than 240 minutes.

(3) Within an oral examination the student must prove his/her ability to recognize interrelations within a scientific field and to classify particular questions according to those interrelations. Within an oral examination it is legitimate to set tasks that must be solved in written form. However, the oral character of an examination must not be affected.

(4) Oral examinations are held in front of several examiners (collegial examinations), or an examiner along with a qualified assessor (single or group examinations). Group examinations can be joined by up to three students. Assessors must contribute to evaluation. Oral examinations last 15 minutes at least, but not longer than 45 minutes for each student. An examination protocol must be created which records main topics of the examination and final grade. The protocol must be

signed by the examiner and the assessor. The result of the oral examination must be announced to the student right after the examination.

(5) The participation in scientific projects proves the ability of the students to work on scientific problems independently and also within a scientific group. The individual part of teamwork must be verified.

(6) A presentation comprises:

- an independent and profound analysis of a certain problem in written form from the field of the lecture considering relevant literature
- description of the work and communicating of the results by means of an oral report and subsequent discussion. The presentation must have been submitted in written form also.

(7) If students provide a medical certificate students are allowed by permission of the examination board to take examinations in a different form than prescribed.

(8) If principle of equal opportunities necessitates, disabled students can be provided with additional work equipment and aids. Processing times can be suitably extended as well as the form of examination can be changed. The definition of "disabled" in this case includes, that students are not able to take examinations in the prescribed form due to long lasting or permanent physical disability. Disability must be proved by medical certificate if required by the University. Students must apply for compensation of disadvantages to the examination board, together with the examination registration at the latest.

(9) Appropriate forms of examinations can also be teamwork. The individual part of each student must be verified by specification of paragraphs, pages, or other appropriate and definable criteria. One group consist of not more than three students.

(10) Type and scope of examinations are defined in annex 1. Examinations can take other than written form or oral form in the following cases:

- a) If less than 20 candidates have signed up for or can be expected for a written examination, the examination board can approve an oral examination instead of a written one on application of the examiner. The approval is valid for the examination concerned only.
- b) If more than 20 candidates have signed up for or can be expected for an oral examination, the examination board can approve a written examination instead of an oral one on application of the examiner. The approval is valid for the examination concerned only.

Students are to be announced about the change of examination type immediately.

(11) The examiner decides on allowed aids. A list of allowed aids must be announced simultaneously to the examination date. Criteria of evaluation are to be disclosed. Evaluation must be announced after four weeks at the latest.

(12) Module examinations of other faculties are under their responsibility.

(13) Safeguarding provisions according to §§ 3, 4, 6, 8 of the Maternity Protection Act and the regulations of the parental leave are to be applied, especially with respect to the calculation of deadlines. If students are given leave due to family

obligations, they are still allowed to take studies and examinations voluntarily. A repetition of an examination during the leave of absence can be applied for to the examination board in written form.

§ 9 Publicity of Oral Examinations

Students of this Programme are allowed to join oral examinations as listeners in case they did not take the examination yet and did also not register for the examination themselves. They are not allowed to join the consulting and the announcement of the result. On application of the candidate listeners can be excluded from the examination.

§ 10 Admission for Examinations

(1) Students who are matriculated in this Programme at the Otto-von-Guericke-University can be admitted for study accompanying examinations.

(2) Students of this Programme apply for admission for study accompanying examinations and repeat examinations within the deadline and corresponding to the form determined by the examination board. In case of non-compliance of the deadline admission will be refused. The examination board can decide on exceptions on written applications of the students.

(4) The application can be withdrawn one week prior to the examination at the latest. A later examination requires new application and admission.

(5) Admission will be refused in the following cases:

1. admission requirements are not fulfilled
2. documents are incomplete
3. the examination had been definitely failed before

§ 11 Evaluation of Examinations and Formation of the Module Grade

(1) Evaluations of written examinations must be announced 4 weeks subsequent to the examination.

(2) Grades are defined as follows:

1	very good	excellent performance
2	good	performance above the average
3	satisfactory	performance corresponding to the average
4	sufficient	performance that meets requirements despite deficiencies
5	fail	performance that has substantial deficiencies and does not meet the requirements

For differentiated evaluation grades can be raised or reduced by a value of 0,3. The grades 0,7; 4,3; 4,7; 5,3 are inadmissible.

(3) An examination must be graded "sufficient" at least by all examiners to be passed. Final grades are formed by the average of all single grades.

(4) A module examination must be graded "sufficient" at least to be passed. If a module examination consists of only one examination the module grade corresponds to the grade of the examination. Final grades of a module which consists of more than one examination are formed by the average of all single grades.

(5) The formation of grades by average only the first decimal place is to be considered. Further decimal places are to be deleted.

up to and including 1,5	very good
from 1,6 to including 2,5	good
from 2,6 to including 3,5	satisfactory
from 3,6 to including 4,0	sufficient
from 4,1	fail

(6) German grades will be supplemented by ECTS grades.

ECTS-Grade	German Grade	ECTS-Definition	German Equivalent
A	1,0 – 1,5	very good	sehr gut
B	1,6 – 2,5	good	gut
C	2,6 – 3,5	satisfactory	befriedigend
D	3,6 – 4,0	sufficient	ausreichend
FX/F	4,1 – 5,0	fail	nicht bestanden

§ 12 Repetition of examinations

(1) Examinations in which the candidate has failed or which have been marked "fail" can be repeated once. A second repetition is only legitimate for two examinations.

(2) The second repetition of an examination must be applied for by the candidate to the examination board in a written form within six weeks after the announcement of the failure of the first repetition.

(3) Repetitions must be taken six weeks after the announcement of the failure at the earliest and at the next regular examination date at the latest. In exceptional cases the candidate can be granted an extension of the deadline. If a candidate misses the deadline for a second repetition §23 comes into effect.

(5) If a candidate fails the second repetition the Master degree is declared as “definitely failed”. The chairman of the examination board issues a corresponding notification.

(6) An examination that has already been passed successfully cannot be repeated.

§ 13

Additional examinations

(1) Students are free to take examinations in other compulsory or compulsory optional modules than given in the enclosed schedule.

(2) On application of the student the result of the additional examinations are recorded in the certificate. The results of additional examinations do not affect the final grade.

II. Master Degree

§ 14

Admission for Master Thesis

(1) Only students who are registered for the M. Sc. Programme at Otto-von-Guericke-University Magdeburg and have achieved 80 Credits within this Programme at least will be admitted to the Master Thesis.

(2) A withdrawal of the registration to the Master Thesis is legitimate before the beginning of the processing time. Another admission for Master Thesis must be applied for again.

§ 15

Topic of the Master Thesis, Processing Period and Evaluation

(1) The Master Thesis proves the ability of the student to work independently and with scientific methods on problems from his/her subject within a specific period of time. The processing period for a Master Thesis is usually 20 weeks. The topic must correspond with the aim of examinations and the processing period.

(2) The topic of the Maser Thesis is usually handed out 4 weeks after admission for the Master Thesis at the latest. Students have the opportunity to suggest a topic for the Master Thesis which should be considered as far as possible. The suggestion

is not legally binding. The chairman of the examination board is responsible for the announcement of the Master Thesis topic within an appropriate amount of time. The announcement of the topic must be put on record and the first and second examiners are appointed.

(3) The master thesis is handed out and tutored by a legitimate examiner according to § 6(1). This person must be member of the Faculty and belong to the group of university lecturers.

(4) The Master Thesis can be teamwork of up to 3 students. The contributions of the students must be clearly distinguishable and it must be possible to evaluate every contribution separately.

(5) The processing period for the Master Thesis is up to 20 weeks. If a candidate falls provably ill it will be an exceptional case. The processing time extends according to the duration of illness but 4 weeks at the longest. If illness lasts longer further processing of the Master Thesis is to be stopped. That does not affect possibility of repetition. The topic can be refused only once and only within the first third of the processing period.

(6) Students can apply for a max. four weeks extension of the processing time. The application must be justified and supported by the advisor.

(7) Students must declare in written form that the Master Thesis has been completed independently and no other than the listed sources have been used.

(8) Two copies of the Master Thesis must be handed in to the examination office within the given deadline. The date of submission must be recorded. If the master thesis is not provided until the end of the deadline it is marked "fail".

(9) The Master Thesis must be evaluated by the examiners within four weeks after submission. The final grade of the Master Thesis consists of the grade of the Thesis Review and the colloquium in equal parts. If one of the grades is "not sufficient" the candidate has failed. A successfully completed Master Thesis including colloquium is given 30 Credits.

§ 16 Colloquium

(1) Within the colloquium students must prove their ability to defend their results of scientific work.

(2) Candidates are admitted for the colloquium if the Master Thesis is graded "sufficient" at least.

(3) The colloquium is a single or group examination. It is run by the examiner of the Master Thesis. The examination board is allowed to name further examiners. The candidate must present the topic, problems, and the results of the Master Thesis by

means of an oral presentation of not more than 15 minutes and must answer questions concerning the topic.

- (4) Candidates pass the colloquium if it is graded “sufficient” at least.

§ 17

Repetition of Master Thesis and Colloquium

- (1) If the Master Thesis is graded “fail” it can be repeated once.
- (2) The rejection of the topic is only possible if the candidate has not rejected the topic before.
- (3) The new topic is announced within a deadline of three month at the latest.
- (4) The Master Thesis cannot be repeated a second time.
- (5) A Master Thesis that has already been completed successfully cannot be repeated.
- (6) The colloquium can be repeated once within four weeks.
- (7) The colloquium cannot be repeated a second time.
- (8) A colloquium that has already been completed successfully cannot be repeated.

§ 18

Final Grade

- (1) If all compulsory and compulsory optional examinations, the Master Thesis, and the colloquium are graded “sufficient” at least the Master Programme is passed.
- (2) The final grade consists of:
50 % - average of the grades of compulsory subjects
25 % - average of the credits and grades of optional compulsory subjects
25 % - grade of the Master Thesis and colloquium

The final grade has one decimal place, partial grades have two decimal places.

- (3) If the average of the final grade is better than 1,3 the predicate “passed with distinction” is awarded.
- (4) If examinations or the Master Thesis including colloquium have been graded “fail” and if another repetition is inadmissible the Master Degree is definitely not passed.

§ 19

Certificates and Confirmations

- (1) The certificate of the Master Degree must be issued within four weeks if possible. The certificate is dated with the date of the last examination. It must be signed by the chairman of the examination board of the Faculty and provided with the official seal of the Otto-von-Guericke-University.
- (2) If a candidate has successfully completed the Master Programme Thesis he/she is provided with a certificate about the results. The certificate contains all module grades, the grade of the Master Thesis and the final grade. It also contains the topic of the Master Thesis and, on application of the student, the results of additional examinations.
- (3) Students also receive a diploma supplement.
- (4) In case of failure of the Master Programme a written notification is to be issued by the examination board. This notification also informs about the possibility of repetitions. The notification about a definitely failed Master Degree must be provided with information on legal remedies.
- (5) In case of university or programme change the students are provided with a confirmation about the examination results on application. In case of (3) application is not necessary. The confirmation also contains missing examinations and information on the failure of the Master Degree.

§ 20

Master Document

- (1) Students receive the Master Document in combination with the certificate. The Master Document has the same date as the certificate. The award of the Master Degree is certified with the Master Document.
- (2) The Master Document is signed by the Head of the Faculty of Process and Systems Engineering and by the chairman of the examination board. It also must be provided with the official seal of the Otto-von-Guericke-University.

III. Final Clause

§ 21

Inspection of Examination Documents

- (1) On application the examination board allows students, after completion of each module and master examinations, to inspect the respective written examinations and its evaluations. Application must be submitted within the deadline of one month after the announcement of the result.

(2) After the delivery of the certificate the written application must be submitted to the examination board within three month. The chairman of the examination board decides on time and place of inspection.

§ 22

Omission, Withdrawal, Deception, Irregularities

(1) An examination is marked “fail” if the candidate

- does not take part in an examination which is obligatory,
- or withdraws from an examination after beginning of the examination,
- or does not take neither the examination nor the repletion within the deadline

without a valid justification.

(2) Justification for a withdrawal or an omission must be reported credibly in a written form and without delay to the examination board. If the student misses to inform the examination board the examination will be graded “fail”.

(3) If the student uses aids that are not permitted or tries to deceive, the examination is graded “fail”. Students who disturb the examination are to be excluded from it by the supervisor. In this case the examination is to be graded “fail”. In serious cases the students can be excluded from further examinations as well.

(4) If the deadline for submission of an examination is not kept by the student, it is to be graded “fail”.

§ 23

Invalidity of Examinations

(1) The examination will be graded “fail” completely or in parts, in case the student deceived willingly.

(2) If a student has missed to fulfil preconditions for an examination not willingly and if this problem occurs after delivery of the certification, the examination can be repeated. If students received admission unjustly by intention, the examination board decides on further steps under consideration of legal regulations.

(3) Students should get the possibility to explain the circumstances to the examination board.

(4) The incorrect certificate is to be withdrawn and to be replaced by a notification according to § 20. The Master Document is to be withdrawn, if the Master examination had been graded “fail” because of deception. A decision according to (1) is impossible after a deadline of five years after the date appearing on the certificate.

§ 24

Decisions, Objection Procedures

(1) All decisions according to these examination regulations must be recorded in written form. The examination regulations must be provided with legal remedies instructions and must be announced according to § 41 VwVfG LSA. An appeal can be submitted within one month after the delivery of the decision.

(2) The examination board decides on the objection. If the objection concerns an evaluation, the objection is forwarded to the concerning examiner by the examination board. Otherwise the examination board merely decides whether

1. the examination procedure has been performed correctly,
2. the examiner referred to incorrect facts
3. universal evaluation principles have been considered
4. the examiner has been influenced by irrelevant considerations.

§ 25

University Internal Announcements of the Examination Board

All decisions that are made in accordance with these Examination regulations, especially admission to examinations, refusal of the admission, application and examination deadlines, and examination results, are to be announced university internal. Regulations concerning data protection are to be considered.

§ 26

Commencement of these Regulations

The Examination regulations come into operation on the day after the internal university announcement.

Examination regulations are based on the decisions of the Faculty Council of the Faculty of Process and System Engineering from 7th May 2013 and the Senate of the Otto von Guericke University from 23rd October 2013.