This translation is provided for information purposes only!
The German version is legally binding!

Official Announcement

No. 24/2016

Published on: 26.04.2016

Study and Examination Regulations of the Otto von Guericke University Magdeburg for the Process Safety and Environmental Engineering Study Programme

On the basis of § 13, Paragraph 1 and § 67, Paragraph 3, Line 8 of the Universities Act of the state of Saxony-Anhalt (HSG LSA) dated 14.10.2010 (GVBI. LSA p. 600) as amended in conjunction with § 6, Paragraph 1 of the Regulations of the Otto von Guericke University Magdeburg from 27.03.2012 (MBI. LSA p. 305), the Otto von Guericke University has enacted the following statutes:

Index

I. General

§ 1

Scope

These Study and Examination Regulations govern the objective, content and structure, as well as the examinations and graduation of the international master study programme Process Safety and Environmental Engineering on the Faculty of Process and Systems Engineering of the Otto von Guericke University Magdeburg.

§ 2

Programme objective

(1) The objective of the programme is to acquire a broad but simultaneously detailed and critical understanding of the subject as well as the ability to work independently in accordance with scientific methods, to familiarize themselves in the multifaceted fields of practice-, research- and teaching-related activities and to be able to master the frequently changing tasks that can arise in professional life.
Students acquire the skills to enable them to critically examine opinions in their subject area, to solve problems as they arise in a scientifically structured way taking into account neighbouring disciplines, and to represent their developed solutions to their peers and lay persons and accordingly to communicate their knowledge. They are in the position to creatively develop their subject area beyond the current level and to acquire new knowledge for themselves. Even on the basis of limited information, graduates can make scientifically founded decisions while considering societal and ethical awareness. They are in the position to assume responsibility within a team.
(2) Study programme-specific objectives are:

- The graduates are versed in the natural scientific fundamental principles of technical processes, especially those related to safety and environment and think and act holistically in the assessment of safety and environmental concerns and their prevention and mitigation.
- The graduates are capable of applying the engineering knowledge gained in their studies to safety and environmental problems and to independently expand their knowledge for the analysis of hazards and their control.
- The graduates recognize starting points for the use of models and methods for formulating problem definitions for their appropriate solution and presentation of results with relevance to their scientific field.
- The graduates develop new products, methods and systematic solutions for dealing with the hazards encountered in technical processes.
- The graduates are able to identify gaps of knowledge in their field and plan and conduct theoretical and experimental studies to bridge these gaps and to critically evaluate the obtained data and draw conclusions.
- The graduates can lead technical discussions professionally and develop and present sound safety concepts on the basis of a level of engineering knowledge.
- The graduates are in a position to support and develop a consciousness for safety and environmental protection in their professional affiliations.

(3) The graduates are offered upon completion of their studies opportunities including:
- Employment in industry, business or administration
- Continuation of the academic studies in the framework of a Ph.D.

(4) Potential areas of employment include:
- chemical industry, pharmaceutical industry, energy industry, process engineering, environmental technology, animal feed and food industries, ceramic industry, metal industry, biotechnology, construction materials, plant construction, consulting, analytical technology, as well as research and development.

§ 3

Academic degree

After successful completion of the examinations required to graduate, the Otto von Guericke University awards the academic degree

"Master of *Science*", or: "M.*Sc."* for short

II. Scope and Progression of Course

§ 4

Admission to studies / admission requirements

(1) The admission requirements for acceptance to the master study programme are:

a) The applicant provides proof of a bachelor degree, a university diploma or a comparable degree awarded by a state or state-recognized college of advanced vocational studies, a Magister degree or through a state examination the completion of studies in chemical engineering, process engineering, environmental and energy process technology or in a closely related subject.

b) The completed degree must contain

- *at least 210 CP (credit points) (according to ECTS), thereof*
- *at least 55 CP (according to ECTS) in the field of mathematics, natural sciences, computer science,*
- *at least 55 CP in the field of engineering fundamentals,*
- *at least 55 CP in the field of process engineering fundamentals.*

c) The exceptional suitability in accordance with paragraphs 2 to 4 must be demonstrated.

d) Graduates of a similarly oriented technical first qualifying academic degree who cannot fulfil the criteria listed in § 4, Paragraph 1b can in case of their exceptional suitability be admitted conditional to fulfilling additional requirements. The determination of suitability rests with the responsible board of examination.

(2) The exceptional suitability will be determined on the basis of the results of the terminal examination in accordance with Paragraph (1) a and requires that the previous course of study was completed with an overall grade of at least 2,3.

(3) Notwithstanding Paragraph 2, exceptional suitability shall be assumed if the degree has not yet been completed at the time of submitting the application, but evidence is provided of completion of at least 180 CP for a seven-semester bachelor degree course and the average grade calculated from the examinations already completed is at least 2,3.

(4) Admission must be refused if the applicant has irrevocably failed examinations in the chosen course of study at a university or equivalent institute of higher education that falls within the area of application of the German Basic Law or is currently engaged in a corresponding examination procedure.

(5) Adequate language of the English language is prerequisite, which must be demonstrated by non-native speakers through

- the ETS TOEFL (550 points for paper-based or 213 points for computer-based or 80 points for internet-based) or
- the Cambridge Certificate of Proficiency in English (CPE) – minimum score: C or

- the Cambridge Certificate of Advanced English (CAE) – minimum score: B or
- International English Language Testing System (IELTS) – minimum overall band score: 6.0

The examination board can fix additional rules, e.g. for countries of origin in which the educational system is predominantly based on the English language.
(6) The decision regarding whether or not the admission requirements are satisfied is made by the Board of Examiners.
(7) Students may only be admitted if no more than 30 CP fewer than the number of CP required under § 4 Paragraph 1b are lacking. The admission is then subject to conditions that must be satisfied within two semesters. The conditions stipulated by the Examination Board must be completed within the specified time limit; otherwise, enrolment shall be cancelled at the end of the second semester. Until the requirements are met, enrolment is conditional.

§ 5
Commencement and duration of studies

(1) Enrolment is possible in the summer and winter semesters. It is recommended that students enrol in the summer semester. The teaching programme is organized accordingly.
(2) The Master's degree course is designed in such a way that the course, including the preparation of the Master's thesis and colloquium, can be completed in a standard duration of three semesters.
(3) The standard course duration including the Master's thesis is 3 semesters.
(4) The sequential organization of the individual modules is to be taken from the attached study plan.

§ 6
Organization and scope of studies

(1) This consecutive master study programme is a full-time, classroom-based whose profile type is categorized as "more research oriented".
(2) The degree course is divided into modules. Modules are generally concluded with an examination.
(3) The required study effort is indicated by the number of credit points (CP). Altogether this amounts to 90 CP, which are distributed among the mandatory and elective modules as well as the Master's thesis. For the successful completion of the master study programme, a total of at least 300 CP must be obtained, including the undergraduate course of studies.
The workload is approx. 30 CP per semester.
The credit points specified describe the study effort, which is, among others, comprised of the participation in classes, the preparation for and reviewing of classes, the independent processing and internalization of the subject matter as well as the demonstration of study achievements. One credit point corresponds to an effort of approx. 30 working hours.
(4) The content of the course is to be taken from the study and examination schedules in the appendix as well as the module handbook.
(5) The examinations for the mandatory modules must be completed by the end of the semester specified in the examination schedule. If this deadline is exceeded by more than one year, then any examinations for this module that have not yet been completed shall be deemed to have been failed once. This clause does not apply if the student demonstrates that the failure to complete the examinations in due time was beyond his or her control.

§ 7
Course structure

(1) The teaching programme includes mandatory modules, mandatory elective modules and elective modules. The teaching staff determine independently within the framework of relevant regulations the balanced technical content of different teaching methods in their modules.
(2) The designation "mandatory modules" applies to all modules that are required for successful completion of the course of studies in accordance with the Examination and Study Regulations.
(3) All modules that students may choose from the mandatory elective part of the course in accordance with the Examination and Study Regulations are designated as mandatory

elective modules. Within the context of the chosen discipline, the mandatory elective modules enable students to pursue individual inclinations and interests and to take the subject-specific requirements of their future field of professional activity into account. The list of mandatory elective modules may be amended in accordance with developments in the disciplines taught and the availability of teaching staff and adapted to the teaching programme of the department. Upon application by the student to the Examination Board for the course in the Faculty of Process and Systems Engineering at Otto von Guericke University Magdeburg, further modules from every faculty of the Otto von Guericke University Magdeburg may, in agreement with the study programme coordinator/subject advisor, be recognized as mandatory elective subjects.
(4) Mandatory and mandatory elective modules are completed with module assessments consisting of one examination. Examinations must be completed during the course of studies either during or at the end of the respective module. For each successfully completed module, a certain number of credits will be awarded in accordance with the European Credit Transfer System (ECTS).
(5) All modules that students complete by their own choice in addition to the mandatory and mandatory elective modules from modules offered by Otto von Guericke University Magdeburg are designated as free elective modules. Students are free to take examinations in the elective modules. The results of such examinations will not be taken into consideration in the determination of the final grade. Upon request they will be included in the transcript.
(6) Mandatory elective / free elective modules shall be held if at least 5 students participate.
(7) The degree course concludes with a final thesis, known as the Master's thesis (and its presentation in a colloquium). The Master's thesis and colloquium equate to a workload of 30 CP. The working time consists of 20 weeks. The final thesis should demonstrate that the student is in the position, within a prescribed amount of time, to independently and competently work on a scientific problem.
(8) The dates mentioned in the Appendix for the completion of modules and examinations should be seen as a recommendation for the completion of the study programme within the standard course duration. Further information about the course can be obtained from study programme consultation of the Faculty of Process and Systems Engineering.

§ 8

Types of teaching activities

(1) Teaching is delivered in the form of *lectures, tutorials, labs, projects, seminars, colloquia,* presentations and excursions, also as a combination thereof.
(2) Lectures serve to coherently present and communicate scientific, functional-technical and creative basic and specialist knowledge as well as methodological skills.
(3) The purpose of tutorials is above all the consolidation of the knowledge conveyed in the lectures and the acquisition of methodological skills in combination with application-oriented practice.
(4) Learned knowledge is put into practice and thereby consolidated in labs.
(5) In a teaching activity labelled "project," a complex task is completed taking theoretical principles into particular account on a practical example. The presentation of the results is completed through, also customary for later profession practice, project report and corresponding colloquium. The project may be supervised by an interdisciplinary teaching team, members of which may act as coach as well as mentor. The students may come from different courses and semesters. Access to projects may depend on the students having fulfilled certain requirements in addition to the module regulations. It is also possible for students, in agreement with a course lecturer, to work on a project independently during a semester.
(6) The purpose of seminars is the scientific preparation of theoretical and praxis-oriented problems in cooperation with teachers and students. These may be conducted in alternating forms (presentation of information, presentations, thesis preparation, discussions) and may be conducted in groups.
(7) The purpose of colloquiums is the consolidated scientific discussion between teachers and students to selected problems.

(8) The purpose of excursion is to gain a first-hand view and collect information as well as the contact to local practitioners.

§ 9

Departmental academic counselling

(1) In order to facilitate orientation at Otto von Guericke University for new students, introductory courses are held at the start of each programme.
(2) These Examination and Study Regulations only contain information of a general nature; for this reason, further information is needed for precise orientation and planning of the course of studies. To this end, students are also recommended to familiarize themselves with the module handbook.
(3) Academic counselling is offered by the faculty for each course. The relevant persons are listed on the faculty website and in the examination office.
(4) Academic counselling can be called upon at any time and is especially useful in the following cases:

- initial difficulties upon commencement of studies,
- choice of study focus,
- substantially exceeding the standard course duration,
- failed examinations,
- change of course or university,
- studies abroad and individual study plan organization.

§10

Individualized part-time study/individualized study plans

(1) Individualized part-time study according to the regulatory framework for an individualized part-time study of the Otto von Guericke University Magdeburg is possible
(2) The aim of individualized study plans is to facilitate the successful completion of the programme within the standard programme duration. They are offered particularly for those students who are dealing with especially heavy demands as a result of long-term illness, the birth of or care for their own children, or similar.
(3) Individualized study plans are principally only possible with the agreement of the study programme coordinator.
(4) The student advisor is the point of contact for students who wish to draw up an individualized study plan.

III. Examinations

§ 11

Examination Board

(1) A Board of Examiners is established to ensure that the duties and responsibilities detailed in these Examination and Study Regulations are satisfied. It consists of 7 members, who are elected by the Faculty Council. The chairperson, deputy chairperson and two further members are elected from among the professors, two members from the academic staff and one member from the student body.
(2) The Board of Examiners ensures proper implementation of the examinations. Further, the board enforces compliance with the terms set out in these Examination Regulations. It makes suggestions regarding the reform of these Examination and Study Regulations. Special emphasis is placed on compliance with the standard course duration and with examination deadlines.
(3) The Board of Examiners makes its decisions based on a majority vote. Abstaining votes are not allowed. In the case of an even split, the chairperson or, when absent, his or her deputy, shall have the deciding vote. The Board of Examiners is quorate when the majority of its members, including at least two members from among the professors, are present.
(4) The term of office of the members of the Board of Examiners is two years, with student incumbency limited to one year. Members may be re-elected.
(5) In *individual cases*, the Board of Examiners may delegate strictly defined and revocable power of authority to the chairperson or his or her deputy. The chairperson prepares and

executes the resolutions of the board, and regularly informs board members as to his or her activities.
(6) The members of the Board of Examiners have the right to participate as observers during the examinations.
(7) The members of the Board of Examiners are obliged to maintain confidentiality. If they are not government employees, members must make a pledge of secrecy to the chairperson.
(8) To support the work of the Board of Examiners, there is an examinations office in the faculty.

§ 12

Examiners and assessors

(1) The Board of Examiners appoints the examiners and assessors. Professors, junior professors, university lecturers, academic staff, provided that they have a teaching role, teaching staff and persons with experience in professional practice and training are authorized to conduct examinations. Examinations may only be assessed by persons who themselves possess at least a Master's degree or equivalent qualification.
(2) For the evaluation of written examination scripts, at least two examiners must be appointed. If the Board of Examiners determines that, having considered all those authorized to be examiners or assessors pursuant to paragraph 1, the additional burdens arising from appointment as an examiner for a particular examination date would have an unreasonable impact on their other duties, or if two examiners are not available, it can thereupon resolve that the written examinations may be marked by one examiner only. The resolution must be communicated to the student when registering for the examination.
(3) Two examiners must be appointed to evaluate the Master's thesis, of which one must be a university lecturer. The evaluation of the Master's thesis is governed by § 23 "Issuing of the topic, submission and assessment of the Master's thesis."
(4) Students may propose examiners for oral examinations and the Master's thesis. This proposal shall not, however, be legally binding.
(5) The examiners are independent in their duties.
(6) The Board of Examiners is to ensure that students are informed in good time as to the names of the examiners.

§ 13

Recognition of periods of study, academic achievements and examination results

(1) Upon written application, the Board of Examiners decides on the recognition of prior periods of study, academic achievements and examination results. The application for recognition of periods of study, academic achievements and examination results completed prior to commencing study at the Otto von Guericke University Magdeburg is to be addressed to the Board of Examiners within four weeks from the beginning of the relevant programme of studies. For purposes of recognition, students must present the necessary original documents or certified copies thereof. The recognition of periods of study, academic achievements and examination results after the application deadline is excluded.
(2) Periods of study, academic achievements and examination results from courses at universities within the scope of application of the German Basic Law shall be credited, provided that no significant difference can be ascertained. Periods of study, academic achievements and examination results obtained abroad shall be credited, provided that there is no significant difference. When crediting periods of study, academic achievements and examination results obtained outside the Federal Republic of Germany, the Lisbon Convention of 11 November 1997, the equivalence agreements approved by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder and the Rectors' Conference of the Universities of Applied Sciences, together with the regulations set out within the context of university cooperation agreements, must be taken into account.
The basis of evaluation, as long as it is already being applied by both parties, is the European Credit Transfer System (ECTS).
(3) Where grading systems are comparable, the grades will be adopted and used in calculating the cumulative grade.
(4) Knowledge and competencies acquired outside of the university can by recognized maximally for up to 50 % of the university studies, as long as they are relevant and

equivalent in content and level to the modules of the study programme. The application for recognition of knowledge and competencies completed prior to commencing study at the Otto von Guericke University Magdeburg is to be addressed to the Board of Examiners within four weeks after acceptance to study. Students must present the documents necessary for recognition in original or as certified copies. The recognition of periods of study, academic achievements and examination results after the application deadline is excluded.

§ 14

Types of examinations during the programme

(1) The following types of examinations may be held during the programme:

1. Written examination (K) (Paragraph 2),
2. Electronic examination (Paragraph 2)
3. Oral examination (Paragraph 3),
4. Scientific project (Paragraph 4),
5. Seminar work/home work (Paragraph 5),
6. Oral presentation (Paragraph 6),
7. Outline (E) (Paragraph 7)
8. Experimental work (EA) (Paragraph 8)

(2) In a **written examination**, students should demonstrate that they, with limited time and limited aids and under supervision with the typical methods of the academic discipline, recognize a program and can find a way to solving it. A written examination shall last for a minimum of 60 minutes and not longer than 240 minutes. Written and electronic examinations using multiple choice may be implemented.

(3) In an **oral examination**, students should demonstrate their capacity to recognize and classify complex issues from the specific topic under examination. As part of the oral examination, a reasonable number of written exercises may be set, provided that the oral character of the examination as a whole is not affected.

The oral examination shall take place with several examiners (panel examination) or with one examiner and an expert assessor in the form of an individual or group examination, whereby up to 3 students may constitute a group. The assessor is to be consulted before a final grade is given. As a rule, the duration of the examination for each student should amount to at least 15 minutes, however not more than 45 minutes. The essential points of the examination and its evaluation must be recorded in a protocol. This record must be signed by the examiners and the assessors. The results of the examination are to be made known to the student at the end of the oral examination.

(4) Through work on a **scientific project**, students should demonstrate their capacity to produce scientific work independently as well as to work in a team. Individual contributions to a project must be clearly discernible.

(5) A seminar work / home work requires an experimental, empirical or theoretical work on a task from the field of study. The nature of the task must allow it to be completed within 1 to 4 weeks. Students are free to propose topics and task definitions. Their proposals shall not be legally binding. In applicable cases, the developed solutions may be presented orally in a manner suitable to the vocational field in question. If students are overburdened with other examination work, the completion time may be extended once by up to the half upon application. In doing so, due consideration must be given to compliance with the standard course duration.

(6) An **oral presentation** encompasses:

- an independent and thorough written discussion of a problem from the content of the course, taking into account and evaluating relevant literature, as well as
- the presentation of the work and communication of the results in an oral presentation as well as ensuing discussion. The written discussion must be available.

(7) An outline encompasses working on a subject-specific or interdisciplinary task from a conceptual and structural point of view taking into account planning aspects in particular and the presentation and explanation of the solutions developed in a manner that is customary in professional practice.

(8) An experimental project encompasses the following particular aspects:
- the theoretical preparation of experiments
- the set up and execution of experiments
- the written presentation of the experimental steps, the test procedure and the results of the experiments as well as their critical evaluation.

(10) Assessment prerequisites (proofs of performance) may need to be satisfied as a condition of admission to a module examination. If a student fails to satisfy the necessary assessment prerequisites, he or she may try again 2 times. The conditions for satisfying assessment prerequisites and their type and scope must be announced by the lecturers at the start of the course.
(11) Group projects are also a permissible form of examination. The contribution of each individual student must meet the examination requirements and be clearly discernible and assessable on the basis of sections, pages or other objective criteria.
(12) The type and scope of the examinations for the individual modules can be found in the examination schedule and/or the module handbook. The types of examination covered by these regulations (written or oral examination) may be amended under the following conditions:
(13) If 20 or fewer candidates are registered or can be expected for an examination that is designated as a written examination, then upon application by the examiner, the Board of Examiners may agree to the examination being conducted orally instead. This approval shall only apply for one examination date.
(14) If 20 or more candidates are registered or can be expected for an examination that is designated as an oral examination, then upon application by the examiner, the Board of Examiners may agree to the examination being conducted in writing instead. This approval shall only apply for one examination date.
Students affected by a change to the form of examination approved by the Board of Examiners must be notified without delay.
(15) The examiner shall decide which examination aids may be used in a written examination. A list of the authorized aids must be released at the same time that the examination date is announced. The examination assessment criteria must be published. Grades are generally to be announced no later than 6 weeks after the examination.
(16) The regulations of the relevant faculties apply for module examinations in other faculties.

§ 15

Protective provisions, compensation for disadvantages

(1) Where a student provides credible evidence (medical certificate) that, due to a prolonged or permanent illness, he or she is completely or partially unable to fulfil the examination requirements in the prescribed form, the Board of Examiners can provide the student with the possibility of taking equivalent examinations in a different form, as far as this is necessary to create equal opportunity. To this purpose examination durations can be lengthened to a reasonable extent or the examination in another form may be approved. The compensation for disadvantage should be requested in writing from the Examination Board. The request should be submitted at the latest with registration for the examination.

(2) The protective provisions pursuant to the Maternity Protection Act and in accordance with the time limits set out by the Federal Child-Raising Allowance Act as to parental leave are to be strictly adhered to and promoted in applying these Study and Examination Regulations. During a leave of absence granted on the grounds of family responsibilities, students are free to continue with their studies and examinations. Upon written application to the Board of Examiners, the repetition of a failed examination during the leave of absence is admissible.

§ 16

Public access to oral examinations

As long as they themselves are not registered to take the same examination, students of this programme who have yet to successfully completed the respective examination may be admitted to the oral examinations as observers. This does not include the counselling and notification of the students being examined regarding their examination results. A student may apply to exclude the observers from sentence 1 from his or her examination.

§ 17

Admission to participate in examinations during the programme

(1) Anyone who is enrolled at Otto von Guericke University in the course specified in §1 may be admitted to the examinations during the course.
(2) Students of this programme apply for admission to the examinations and re-examinations within the period of time specified by the Board of Examiners until at the latest 2 weeks before the examination date. Failure to comply with the registration precludes admission to the examination, unless the Board of Examiners decides otherwise upon written application by the student.
(3) Suggested examiners and, where the corresponding documentation is not already in the possession of Otto von Guericke University, evidence of completed assessment prerequisites, must be appended to the application for admission.
(4) The application may be withdrawn no more than one week prior to the respective examination date. In the event of a withdrawal, a new application for admission to the examination must be submitted in accordance with paragraphs 1 and 2 for a later examination date.
(5) The Board of Examiners is responsible for admission decisions. Admission must be refused if:
1. the requirements for admission are not fulfilled or
2. the documents are incomplete or
3. the examination has been irrevocably failed or is deemed to have been irrevocably failed.

§ 18

Grading of examination results and determination of module grades

(1) Each examination is graded by the respective examiners. For written examinations, grades should be announced no later than four to six weeks after the examination has been taken.
(2) The following grades are to be used for the assessment of examinations:

Grade		
1	very good	an outstanding performance
2	good	a performance which is significantly above average
3	satisfactory	an average performance
4	sufficient	a performance which, in spite of its shortcomings, is considered to be sufficient
5	insufficient	a performance which, because of substantial shortcomings, does not meet the requirements

To differentiate, individual grades may be rounded up or down by 0.3; this does not apply to the following grades: 0.7, 4.3, 4.7 and 5.3.
(3) An examination is passed if a minimum grade of "sufficient" is awarded. If an examination is graded by multiple examiners, it is passed if all examiners award at least a grade of "sufficient". In this case the grade awarded for the examination corresponds to the arithmetic average to one decimal place of the individual grades determined by the examiners, notwithstanding the regulation stipulated in paragraph 2.
(4) A module examination is passed when the necessary examination has been awarded a grade of at least "sufficient". If a module examination comprises several exams, the module grade is the weighted, arithmetic average of the grades of the examinations in the module,

cut-off after the first place after the comma, notwithstanding the regulation stipulated in paragraph 2.
(5) A multiple choice examination is passed if the examination candidate obtains at least 50 percent of the possible points (absolute scale) or if the points scored by the candidate are not less than 22 percent of the average score of all candidates for the specific examination date (sliding scale). The sliding scale only applies if the examination candidate has achieved at least 40 percent of the possible points. The difference between the relative and absolute pass mark shall be added for each examination candidate in order to determine the individual examination results. This paragraph shall be applied if the proportion of multiple choice examination questions exceeds 50 percent.
(6) When compiling a grade by means of averaging, only the first decimal place will be taken into account; all other decimal places will be disregarded without rounding. The grade scale is:

For an average grade of	Grade
up to and including 1.5	very good
from 1.6 up to and including 2.5	good
from 2.6 up to and including 3.5	satisfactory
from 3.6 up to and including 4.0	sufficient
from 4.1	insufficient

§ 19

Repetition of examinations

(1) Examinations that are failed or deemed to have been failed may be repeated. A second repetition is possible for a maximum of three examinations.

(2) The second repetition of an examination during the course is to be applied for and justified before the Board of Examiners in written form within a six-week cut-off period immediately following notification of having failed the first repetition.

(3) Repeat examinations must be taken no sooner than 6 weeks and by no later than 14 months after the failure of the examination, unless an extension is granted to the student for specific reasons that are beyond his or her control. The student must reregister for the examination. § 18 applies accordingly for the assessment. Should the student interrupt his or her course of studies, or in the case of other justified reasons, binding stipulations must be made by the Board of Examiners regarding the completion of repeat examinations. § 30 applies should the deadline for repetition of the examination be missed.

(4) Unsuccessful attempts at passing an examination in the chosen course of studies at a university that falls within the area of application of the German Basic Law will be counted towards the total permissible number of repetitions.

(5) An examination that has been passed may not be repeated.

§ 20

Supplementary examinations

(1) Students may also take examinations in modules additional to thee mandatory and mandatory elective modules specified in the attached examination schedule.

(2) The results of supplementary examinations will be included in the academic transcript and/or certificates upon request of the student. The results of supplementary examinations are not taken into consideration when calculating grade point averages and when determining the cumulative grade.

§ 21

Free attempt

(1) If the student meets the admission requirements, examinations may be taken before the period prescribed in the study schedule.

(2) If the examination for a module is completed in accordance with paragraph 1 and the module examination is not passed, it shall be deemed not to have been taken (free attempt). If a module examination is taken in accordance with paragraph 1 and graded with at least “sufficient” (4.0), upon application by the student the module examination may be repeated at the next regular examination date in order to improve the grade. In these cases, the better grade counts.

IV. Master’s Thesis

§ 22

Master’s thesis registration

(1) Only students who are enrolled at the Otto von Guericke University in the course specified in § 1, who can demonstrate that they have obtained at least 50 credit points in the course of studies at Otto von Guericke University and at least 50 CP from the mandatory and mandatory elective parts of the course shall be permitted to register for their Master’s thesis.
(2) Students are to make a written application to the Board of Examiners for admission to write their Master's thesis. A proposal for the subject area from which the Master’s thesis is to be taken, and if necessary an application for the issuing of the subject as a group thesis, and, if necessary, suggested examiners, must be appended to the application.
(3) The date on which the subject is issued must be documented with the faculty examinations office.
(4) An application to register for a Master's thesis may be withdrawn before the beginning of the completion period. In the event of withdrawal, a new application must be made to write the thesis at a later date.

§ 23

Issuing of the topic, submission and assessment of the Master’s thesis

(1) The Master's thesis should demonstrate that students are capable of working on a problem independently with scientific methods within a prescribed amount of time. The topic and task definition of the Master's thesis must correspond to the purpose of the examination and the required period of time.
(2) The topic of the master’s thesis is generally issued no later than 4 weeks after permission to write the Master’s thesis has been granted. Students should be given the opportunity to make proposals for the Master's thesis topic and task definition. Wherever possible, the student’s proposal should be accepted. However, it shall not be legally binding. The chair of the Board of Examiners ensures that the student receives a topic for his or her Master’s thesis within a reasonable timeframe. The issuing of the topic must be recorded. With the issuance of the topic, the first examiner (who has set the topic) and the second examiner shall be officially appointed.
(3) The Master’s thesis is issued and supervised by a person who is authorized to be an examiner in accordance with § 12 Paragraph 1. This person must be a member of the faculty to which the course belongs. The task definition must be confirmed by a university lecturer. If several faculties are involved in a course, this person must belong to one of these faculties. In justified exceptional cases, the topic may, however, with the approval of the Board of Examiners, be issued by a person who is authorized to be an examiner who does not fulfil this condition. In this case, the second examiner must be a member of the faculty.
(4) The Master's thesis may be completed in the form of a group thesis. The contribution of each individual student must be clearly discernible and assessable on the basis of sections, page numbers or other objective criteria, and meet the examination requirements as per Paragraph 1. The group size is limited to 3 students.
(5) The time from the issuing of the topic until the submission of the Master’s comprises 20 weeks. In verifiable circumstances beyond the control of the student, the Board of Examiners

may upon written application extend the deadline. An aborted attempt due to extended illness shall not be counted among the number of possible repetitions. The topic may only be returned once and only within the first third of the completion time.
(6) A justified application to extend the submission deadline by a maximum of 6 weeks must be submitted in due time by the student to the Board of Examiners following a statement from the supervisor.
(7) When submitting the Master's thesis, a student must guarantee in writing that the thesis – or identified section in the case of a group thesis – has been written individually and that no sources or tools have been used other than those cited in the bibliography.
(8) Two copies of the Master's thesis must be submitted within the time limit and in accordance with the style guide for the production of Bachelor's and Master's theses for the Faculty of Process and Systems Engineering to the examination office; the date of submission must be recorded. If the Master's thesis is not submitted within the time limit, it shall be considered to be graded as "insufficient".
(9) Examiners should appraise and grade the Master's thesis within four weeks from the date on which it is submitted. §18 applies accordingly.
(10) The module grade consists of 2/3 of the grade for the Master's thesis and 1/3 of the grade for the colloquium. The Master's thesis is failed if one of the two appraisals or the colloquium is graded "insufficient". For the successfully completed Master's thesis and colloquium, 30 CP shall be awarded.

§ 24

Colloquium

(1) In the colloquium, students have to prove that they are in the position to defend the results of scientific activities of a discipline in an academic discussion.
(2) For the student to be admitted to the colloquium, the Master's thesis must have been graded at least "sufficient" by both examiners.
(3) The colloquium shall be held as an individual or group examination by the Master's thesis examiners. The Board of Examiners may appoint additional examiners. In the colloquium, the topic of the Master's thesis and the associated problems and findings should be described in a maximally 20 minute-long oral presentation and subsequently related questions should be answered. In the case of a group examination, the time shall be reduced to a maximum of 15 minutes per student. As a rule, the total duration of the examination for each student should be 45 minutes, and not more than 60 minutes.
(4) The colloquium is successfully completed if the examiners award a minimum grade of "sufficient".

§ 25

Repetition of the Master's thesis and the Master's thesis colloquium

(1) A Master's thesis may be repeated once with a new topic if it has or is deemed to have been graded as "insufficient".
(2) If a Master's thesis is repeated, returning a topic is only permissible if no use was made of this possibility the first time.
(3) The new topic of the Master's thesis will be issued in a timely manner, generally within three months.
(4) Repetition of a successfully completed Master's thesis is not permitted.
A second repetition is not permitted.
(5) The colloquium for a Master's thesis may be repeated once if it has or is deemed to have been graded as "insufficient". The repetition must take place within 4 weeks.
(6) Repetition of a successfully completed Master's thesis colloquium is not permitted.

§ 26

Overall result of the Master's degree

(1) The Master's examination is passed if all mandatory and mandatory elective module examinations required in accordance with the study schedule and the Master's thesis and colloquium have been awarded a minimum grade of "sufficient".

(2) The overall grade of the degree consists of:
2/3 of the grades for the module examinations weighted with the credit points
1/3 from the grade for the Master's thesis and colloquium
(3) If the average of the cumulative grade is better than *1,3*, then the classification "passed with distinction" shall be awarded.
(4) The Master's degree is irrevocably failed when a course examination or Master's thesis and colloquium have received a grade of "insufficient" or are deemed to have been graded "insufficient" and no further repetitions are permitted.

§ 27

Transcripts and certificates

(1) Transcripts are to be issued without delay, if possible within four weeks of the Master's examination having been passed. The transcript bears the date on which the last examination was completed. It is to be signed by the chair of the Board of Examiners and stamped with the Otto von Guericke University stamp.
(2) If a student has attained the Master's degree, then he or she shall receive a transcript detailing the results. The transcript will include the module grades, the grade for the Master's thesis and the overall grade and ECTS grade. Furthermore, the transcript will indicate the topic of the Master's thesis together with – should the student request it – the result of examinations in supplementary subjects.
(3) Together with their transcripts, students receive a Diploma Supplement.
(4) If the Master's degree is not awarded or is deemed to have been failed, then the Board of Examiners will issue the student with written notification of this fact, including information regarding whether and to what extent examinations may be repeated.
(5) If students choose to leave the University or change their programme of studies, upon application they will be issued with a certificate showing the examinations taken and grades achieved. This will indicate the examinations remaining to be completed as well as whether or not the Master's examination has been failed or irrevocably failed.
(6) The decision about a terminally failed master examination is to accompanied with instructions about the right to appeal.

§ 28

Certificate

(1) With the transcript students also receive a degree certificate bearing the same date as the transcript. The certification of the award of the title of Master is therein announced.
(2) The degree certificate is signed by the Dean of the Faculty of Process and Systems Engineering and the Chair of the responsible Board of Examiners and is also furnished with the Otto von Guericke University stamp.

V. Final Provisions

§ 29

Access to examination records

Up to one year after completion of their degree, upon written application students are entitled to view their study and examination records. The application must be submitted to the Board of Examiners of the Faculty of Process and Systems Engineering. The chairperson of the Board of Examiners will determine the time and place for reviewing the documents.

§ 30

Absence, withdrawal, cheating, breach of regulations

(1) An examination shall be deemed to have been graded "insufficient" when students, for no good reason:
- do not attend a binding examination date,
- withdraw from the examination after it has already begun,
- do not take or retake an examination within the established time frame.

(2) The justifications provided for any withdrawal or absence must be credible presented in writing to the Board of Examiners without delay. Otherwise, the examination will be graded as "insufficient". In case of illness, a medical attest must be presented. Unless the Board of Examiners resolves otherwise, upon recognition of the reasons for absence or withdrawal, the examination must be taken on the next regular examination date.

(3) An examination will be graded "insufficient" if a student attempts to alter the results through deceit or the use of unauthorized means. Examiners and supervisors are authorized to exclude from further participation any student who disrupts the orderly conduct of the examination. If this is the case, the examination will be graded as "insufficient". In extreme cases, the Board of Examiners is authorized to exclude the student from any further examinations.

(4) An examination will be graded as "insufficient" if the student does not provide sufficient reason for not having respected the submission deadline for an assessment. Paragraph 2 applies accordingly.

§ 31

Invalidity of examination results

(1) If a student has cheated in an examination and this becomes known after the degree has been awarded, the Board of Examiners is authorized to declare an examination to have been failed either partially or in its entirety.

(2) If the conditions for admission to the examination were not met but without any intentional deception, and this only becomes known after the degree has been awarded, the deficiency is deemed to have been righted if the examination was passed. If a student has deliberately used unfair means to gain admission, the Board of Examiners, taking into consideration relevant legal regulations, will decide as to the revocation of unlawful administrative deeds.

(3) Prior to such a decision, the affected student is to be given the opportunity to make a statement on the matter to the Board of Examiners.

(4) The incorrect transcript is to be retracted, and if necessary replaced with a new transcript or certificate in accordance with § 27. The Master’s degree certificate is to be retracted, if the Master's examination is declared to have been failed as a result of the act of deception. A decision following Paragraphs 1 and 2 is precluded after a period of five years from the date of the transcript.

§ 32

Decisions, appeal procedure

(1) All decisions made in accordance with these Examination Regulations and which constitute an administrative deed are to be justified in writing and furnished with instructions on appeal in compliance with Article 41 of the Administrative Procedures Act of Saxony-Anhalt (VwVfG LSA). An appeal against this decision may be submitted within one month of notification. The appeal must be submitted in writing or by recorded declaration to the Board of Examiners of the Faculty of Process and Systems Engineering.

(2) The Board of Examiners decides about the appeal. If the appeal involves a grade, the appeal will be sent to the examiner or examiners for their review. The Board of Examiners will declare the objection to have been remedied if the grade is changed in accordance with the appeal. Otherwise, the Board of Examiners only reviews the decision in terms of if:

1. the examination procedures were properly conducted,
2. the examiner relied on unfounded facts or circumstances,

3. generally valid principles of grading were applied,
4. the examiner was influenced by immaterial considerations.

§ 33

Withdrawal/revocation of the academic title

Withdrawal or revocation of the Master's degree proceeds in accordance with § 20 of the Universities Act of Saxony-Anhalt.

§ 34

University-wide announcements by the Board of Examiners

Decisions and other measures relating to these Examination Regulations, especially with regard to admission to examinations, refusal of admission, registration and examination dates and deadlines as well as examination results, will be made known University-wide in the institution's customary manner. In doing so, data protection regulations will be observed.

§ 35

Effective date of regulations

These Study and Examination regulations shall enter into force on the day after they are published in the official announcements of Otto von Guericke University.
Issued by virtue of the resolutions of the Faculty Council of the Faculty of Process and Systems Engineering dated 12.04.2016 and the Senate of Otto von Guericke University dated 20.04.2016.

Magdeburg, 21.04.2016

Prof. Dr.-Ing. habil. Jens Strackeljahn
President
of the Otto von Guericke University Magdeburg

Appendix
Study and examination schedule

Study and Examination Schedule

Master Process Safety and Environmental Engineering

	1. Semester			2. Semester			3. Semester		
	CP	SWS	PA	CP	SWS	PA	CP	SWS	PA
Required Coursework	∑ = 50 CP								
Module 1 – Thermal Process Engineering	5	2-2-0	K120						
Module 2 –Advanced Heat and Mass Transfer				5	2-2-0	K120			
Module 3 – Chemical Reaction Engineering				5	2-2-0	K120			
Module 4 - Hazardous Properties of Materials			K240						
Hazardous Materials and Safety Characteristics	3	2-0-0							
Dispersion of Hazardous Materials	4	2-1-0							
Industrial Explosion Protection	3	2-0-0							
Module 5 - Technical Risks and Risk Assessment						K240			
Methods of Risk Analysis				4	2-1-0				
Fire Safety in Industrial Facilities				4	2-1-0				
Simulation Lab	2	0-0-2	P/F						
Module 6 - Environmental Engineering						K240			
Air Pollution Control				4	2-1-0				
Waste Water and Sludge Treatment	4	2-1-0							
Environmental Science Research Project	2	0-0-2	P/F						
Module 7 – Process Safety									
Legal Issues in Plant Operation and Process Safety				3	2-0-0	G			
Excursion				2	0-0-2	G			
Elective Coursework	∑ = 10 CP								
Module 8 - Elective Courses	7	5		3	2				
Module 9 - Master Thesis							30		KO
Sum	30			30			30		

CP – Credit points
G – Graded assessment
K – Final examination (duration given in minutes)
KO – Colloquium
PA – Final examination
P/F – Pass-Fail
SWS – Semester week hourly workload (Lecture-Tutorial-Lab)