

This is an unofficial translation of the admission and examination regulations of the University of Stuttgart for the Master Programme Geomatics Engineering (GEOENGINE). Only the German version is of legal relevance.

Admission Regulations for the GEOENGINE Master Programme at the University of Stuttgart

From 18th March 2013

As defined in § 29 paragraph 2 art. 5 and 6 of the Landeshochschulgesetzes (the state's law on universities) from 01.01.2005 (Journal of Law 2005, p.1), last amended by law on 14.07.2012 (Journal of Law, p.457) in correspondence with § 20 paragraph 1 and 3 der Hochschulvergabeverordnung from 13th January 2003 (Journal of Law, p.63), last changed by law on 14.07.2012 (Journal of Law, p.457) as well as § 5 in correspondence with § 3 of the higher-education admissions law from 15th September 2005 (Journal of Law, p.629), last changed by law on 14.07.2012 (Journal of Law, p.457) the Faculty Senate of the University of Stuttgart decided on 25th July 2012 upon the following regulations.

§ 1 Admission Requirements

(1) The admission to the GEOENGINE Master Programme requires a professional qualification. To qualify for this programme, the applicant must:

1.a) have a Bachelor Degree (or an equivalent qualification) in Geodesy & Geoinformatics Studies (Geomatics Engineering) of at least six semesters or in another related course of study with qualifying results at a German university or at an equivalent institution of higher education, a dual university or at a university of cooperative education, which equates a university degree of applied sciences.

or

1.b) have acquired in this field of subject or in another related course of study an equivalent degree with qualifying results at a foreign university or institution of higher education

as well as

2. if within the applicants graduation he/she acquired according to No. 1a) respectively b) following skills, which are required for a successful graduation of the Master Degree Programme: within the course of study the applicant has acquired knowledge and skills, which are equivalent in content and demand to a Bachelor Degree of Geodesy & Geoinformatics and fulfil the professional requirements for a GEOENGINE Master Degree Programme. The admission committee decides upon degree equivalence.

as well as

3. Has proven an adequate knowledge of English. As a general rule, a TOEFL-test is required with a minimum of 80 points (Internet based test) or another equivalent proof.

(2) The admission committee decides, if the requirements set out in paragraph 1 are fulfilled and if the candidate's performance to date and their proven skills meet the professional requirements for a GEOENGINE Master Degree Programme. The process and the criteria used to determine the professional qualification are set out in appendix 1. If the competencies set out in paragraph 1 No 2 have only been partly proven, the admission committee may grant admission with conditions set out in paragraph 3.

(3) The admission committee may grant admission with condition according to § 60 paragraph 1 sentence 5 of the Landeshochschulgesetz, where modules respectively competencies, which have not been proven according to paragraph 1 No 2, can be taken at a later date. The conditions may contain a maximum of 30 credit points. These conditions must be fulfilled with the registration for the Master Thesis at the latest.

(4) In cases of doubt, the submission of certificates of the general university entrance qualification respectively a subject-linked university entrance qualification or an equivalent university entrance as recognized by the competent institution may be required.

§ 2 Admission Procedure, Application Forms and Deadlines

(1) Admissions are granted only at the beginning of the winter semester. Applications for admission to the winter semester must reach the university before or on 15th March of the year. In exceptional cases, if places of study are left, i.e. available, after this date, applications may be taken into consideration till 15th July the latest.

(2) Applications must be submitted in the correct application form according to the admission and registration regulations of the University of Stuttgart. Along the required proof, the application must also contain evidence that the admissions criteria listed in § 1 are met.

(3) The admission committee proposes to the Rector of the University the candidates that may be admitted for the GEOENGINE Master Programme. If according to § 1 the number of qualified applicants exceeds the number of available places of study (cf. § 4), the admission committee will establish a rank order of the qualified applicants. The rank order will be set up according to the standard requirements in § 1.

(4) The Rector of the university decides whether the applicant will be admitted or not.

(5) Admission is to be refused, if

1. the application has not reached the university in the proper form and within the time prescribed,
2. according to § 1, the application requirements are not fulfilled.

(6) Apart from this, the general requirements for the admission procedure remain unaffected.

§ 3 Number of Admissions, Admissions into higher Semesters

(1) As long as the number of places of study for the GEOENGINE Master Programme is limited, the number of available places of study is in accordance to the respective current version of the number of admission regulations of the State of Baden-Württemberg.

(2) The places of study available under paragraph 1 will be allocated as follow: 75% to applicants under § 1 No.1b) and 25% to applicants under § 1 No.1a). Available places of study in one quota will be distributed to the other quota. If there are more applicants than positions, the admission committee decides according to § 2, clause 5 about the rank order taking into consideration the applicant's qualifications under § 1 No.1a) and b).

(3) If a minimum of 150 credit points have been acquired in the Bachelor Degree by the closing date for the submission of applications, an admission may be granted according to the decisions of the Hochschulvergabeordnung (Ordinance on the Award of University Places) in the respective current version provided that the Bachelor Degree and the admission requirements under §1 have been proven up to registration or till 30th September the latest. The application for admission should include, by the time of application, proof of the achieved credit points in the graduated modules, as well as proof of the total points with an average calculated grade.

(4) In addition to the provisions of this article and the regulations of the admission and registration ordinance of the University of Stuttgart, the regulations of the Hochschulvergabeordnung (HVVO) are to be taken into consideration in the respective current version.

(5) Admissions to higher semesters are not allowed.

§ 5 The Admission Committee

The Faculty Council of the Faculty for Aerospace Engineering and Geodesy will appoint an admission committee for the admission procedure. This committee is made out of 6 members from the scientific council, of which at least 3 are chosen from the group of the university professors. A student member in advisory capacity will join the committee as nominated by the members of the faculty council.

§ 6 Entry into Force

This admission regulation enters into force retrospectively on 1st March 2013. This applies firstly to the admission procedure for the winter semester 2013/14. At the same time, the admission regulation for the GEOENGINE Master Programme from 3rd August 2007 ceases to be in force (official notice No. 42/2007).

Stuttgart, 18th March 2013

Prof. Dr.-Ing. Wolfram Ressel
(Rector)

Appendix 1

The recognition of professional competence under § 1 paragraph 2 is determined by the following criteria

1.1 The admission committee evaluates the subject specific competences and the exam achievements delivered so far on a scale from 0 to 50 points.

1.2 The admission committee gives points between 0 and 30 for the proof of the subject specific competences according to § 1 paragraph 1 No. 2.

1.3 In case the Bachelor Degree is better than 3.0, the applicant receives one point for every tenth part of a grade. The maximum number of points is 20.

1.4 The points from No. 1.2 and 1.3 will be added together. Applicants, who get a minimum of 35 points are suited for this course of study.

Examination Regulations for the Geomatics Engineering Master Programme (GEOENGINE) of the University of Stuttgart

From 25th March 2013

Based on § 34 section 1 clause 3 of the Landeshochschulgesetzes (the state's law on universities) from 1st January 2005 (Journal of Laws 2005, article 1), last amended on 14th July 2012 (Journal of Laws, article 457) the Senate of the University of Stuttgart decided about the hereinafter referred to as the study and examination regulations for the GEOENGINE Master Programme on 12th May 2012.

The Rector of the University of Stuttgart agreed to this article according to § 34 section 1 clause 3 of the Landeshochschulgesetzes on 25th March 2013, file number 7831.175-G-01.

Table of contents

I. General Regulations

- § 1 Purpose of Examination
- § 2 Master Degree
- § 3 Credit Point System and Modules
- § 4 Study Program Structure, Standard Period of Study, Credit Points
- § 5 Study Program and Examination Structure
- § 6 Exam Deadlines
- § 7 Examination Board
- § 8 Examiners and Examination Assessors
- § 9 General Admission Requirements
- § 10 Module Exams, Study and Examination Achievements
- § 11 Course Language
- § 12 University Achievements and Course Associated Examinations
- § 13 Oral Examinations
- § 14 Written Examinations
- § 15 Evaluation of the Study and Examination Achievements, Module Grades
- § 16 Failing, Withdrawal, Deception, Compliance Deviation
- § 17 Passing and Failing
- § 18 Re-examination
- § 19 Recognition of Periods of Study, Study and Examination Achievements

II. Master – Examination

- § 20 Purpose of the Master Examination
- § 21 Form and Content of the Master Examination
- § 22 Master Examination
- § 23 Composition of the Final Grade and Grade Certificate
- § 24 University Degree and Master Certificate

III. Final Provisions

- § 25 Access to Examination Files
- § 26 Invalidity of an Exam
- § 27 Entry into Force and Final Clauses

Annex: Overview of the Module Examinations

Preamble

The study and examination regulations for the GEOENGINE Master Programme describes the structure of the course of study and the organisation of the exams. It presents the policies and the legal basis for a uniform administration of the course of study and the evaluation of the study and examination achievements. It addresses both students and examiners as well as governing bodies of the University of Stuttgart.

I. General Regulations

§ 1 Purpose of Examination

The Master Examination constitutes an additional professional qualification. The Master Examination establishes if the student has passed the target set out in the Bachelor Degree and has acquired the capacity to work independently with relevant methods on scientific questions from their Master subject, as well as develop scientific topics and apply them in complex situations.

§ 2 Master Degree

Upon passing the Master Examination, the candidate shall be conferred the Master of Science Degree (abbr. M. Sc.) by the University of Stuttgart.

§ 3 Credit Point System and Modules

(1) During the course of study a number of credit points has to be acquired. They represent a quantitative measure for the study-related activities of the student's amount of work. Every semester an average of 30 credit points has to be acquired. This equals a student's workload of about 900 hours. In order to acquire credit points, the student has to successfully participate at courses and lectures, i.e. a successful acquisition of study achievements, and is bound to passing exams of the respective modules or part modules.

(2) The course of study is structured into modules, where the student can acquire a number of credit points associated with these modules upon passing the module or part module examination. These modules contain related courses and usually extend from one to maximum two semesters.

§ 4 Study Program Structure, Standard Period of Study, Credit Points

(1) The standard period of study is four semesters. This includes the module examinations as well as the Master Examination.

(2) The total amount of credit points needed to acquire the Master Degree is 120. Out of this amount, 30 points are allocated to the Master Thesis and the rest of 90 points to the study and examination achievements during the course of study.

(3) Credit points are to be acquired only by submitting the study and examination achievements evaluated as at least „sufficient“ or „successfully completed“. The allocation of credit points of each modules, compulsory and compulsory optional courses will be displayed in Appendix 1 of this regulation.

§ 5 Study Program and Examination Structure

(1) The Master Examination consists of module examinations during the course of study and the Master Thesis. The curriculum extends over three semesters. The Master Thesis is to be done in the fourth semester.

(2) The students must attend compulsory courses totalling 72 credit points and optional courses totalling 18 credit points. The regulations for the compulsory courses are to be found in Appendix 1 of this examination regulation, as well as the regulations for the optional courses.

§ 6 Exam Deadlines

(1) The right to examination for the GEOENGINE Master Programme expires, if the Master Examination has not been successfully passed within 8 semesters, unless the examinee is not responsible for exceeding the deadline. The examination board decides on this following as requested by the person to be examined.

(2) Future mothers are not allowed to take any exams in the last six weeks before childbirth, unless they expressly agree to take the exams. The declaration must be exercised in writing to the chairman of the examination board and can be revoked at any time. Women in childbed are not allowed to take any exams until expiry of a period of 8 weeks after childbirth. The deadline is extended to 12 weeks for mothers after a premature or multiple childbirth; additionally, after a premature childbirth, the deadline is extended to a period of time, which according to clause 1 would not have been exercised otherwise. In the event of a child's death, the mother may express request to take exams before the expiry of the deadline, if not attested by a physician otherwise. She may revoke the declaration towards the chairman of the examination board at any time.

(3) Students living in the same household as and caring for a child under the age of eight by themselves, are entitled to take individual exams after the deadlines provided in this examination regulation. The chairman of the examination board decides about the extension of the deadline as requested by the examinee. Deadlines for re-examinations can be extended by no more than two semesters. The operating time for the Master Thesis is to be extended only within the deadline set out in § 22 section 5. The authorisation expires at the end of the semester, as the conditions specified in clause 1 are cancelled. The deadline set out in section 1 may be extended to maximum six semesters pro child, if the requirements specified in clause 1 are provided for this period of time. Additionally, the authorisation expires at the end of the semester the latest, the moment the child has reached the end of the eighth year. Students are liable to provide the necessary proof, as well as to communicate any changes in their circumstances immediately.

(4) Students capable of study but unable to join lectures regularly or deliver the expected university achievements due to long-term illnesses, prolonged or permanent physical disabilities, are entitled to take individual exams after the provided deadline in the examination regulation. The chairman of the examination board decides about the extension of the deadline as requested by the examinee. Deadlines for re-examinations can be extended by no more than two semesters. Additionally, the maximum period of the extension is two years. The person to be examined is liable to provide the necessary documents, especially medical certificates; in cases of doubt, a medical certificate from a doctor nominated by the university may be required. Any changes in the student's circumstances are to be communicated immediately.

(5) An activity as a chosen member of an agreement committee or of a higher-education organ or of the student body during at least one year may not be taken into account for the calculation of the testing periods up to one year of study; any decision shall be made by the Rector at the request of the person to be examined.

§ 7 Examination Board

(1) The Faculty for Aerospace Engineering and Geodesy provides an examination board for the exam organisation and further exam-related tasks. The chairman of the examination board, the deputy chairman, the other members and their representatives are appointed by the higher Faculty Council of the Faculty for Aerospace Engineering and Geodesy. The examination board is composed as follows:

1. three university professors or adjunct professors provided they are employed at the University of Stuttgart,
2. one member of the scientific council,
3. one student with an advisory vote.

The position of the chairman of the examination board may be also represented by one university professor or an adjunct professor within the meaning of No.1. The chairman conducts the matters of the examination board. Furthermore, the chairman may be assigned certain tasks under revocable status by the committee.

(2) The term of office for members is three years and one year for the student members.

(3) The examination board makes sure the clauses of this ordinance are respected. The examination board is to regularly report to the faculty council on the development of the examinations and study durations, as well as on the distribution of the final grades. The board has to ensure that the study and examination performances are provided within the specified period of time stipulated in the ordinance. For this purpose the students need to be informed about the form and number of study and examination achievements to be rendered, as well as about the due dates.

(4) The members of the examination board have the right to be present when examinations are being held.

(5) The members of the examination board and their deputies are subject to professional secrecy. If they are not public sector employees and already obliged to maintain secrecy, they are to commit to secrecy by the chairman.

(6) Negative decisions by the examination board or its chairman must be notified in written form to the candidate without delay by stating the reasons and procedures for appeal. Appeals against these decisions are to be submitted in written form to the examination board within a month after the date of notification of this decision. If the examination board does not remedy this appeal, the Pro-rector of Education and Advanced Education is submitted to decision.

§ 8 Examiners and Examination Assessors

(1) The examination board appoints the examiners. The appointing may be delegated to the chairman of the board. The examiners appoint the assessors.

(2) University professors and lecturers or private lecturers, as well as academic employees and qualified teachers for special tasks with licence examination are eligible to hold higher-education examinations, which are not course relevant. Academic employees, assistant lecturers and teachers for special tasks are only exceptionally appointed as examiners, if there are not enough available university professors and lecturers or private lecturers.

(3) The member of the teaching staff who held the course is usually appointed as examiner within the course relevant examinations.

- (4) The assessor must have passed a Master Examination in Geodesy § Geoinformatics or an equivalent exam.
- (5) Paragraph 7 section 5 applies to the examiner and the assessor likewise.
- (6) The examinees are informed in time about the examination date and the names of the examiners either by display or in another way.

§ 9 General Admission Requirements

- (1) The admission to a module exam as well as to the Master Thesis is granted to students who:
1. are enrolled at the GEOENGINE Master Programme of the University of Stuttgart at the time of the exam registration,
 2. fulfil the professional admission requirements for the exam in question,
 3. provide the fulfilment of conditions for the admission to the Master Thesis, as far as an admission with conditions is given and
 4. have not lost the admission right to exam for the GEOENGINE Master Programme or another related course of study at another university or at an equivalent higher-education institution in Germany. In the case of a related course of study, this applies only to the loss of admission for exams and modules necessary in the GEOENGINE Master's Programme as well. The examination board decides about the related courses of study.
- (2) The application for admission must be submitted to the examination office for every module exam in written form in accordance with the requirements. If not already available, the application should include the following:
1. evidence about the specified admission requirements set out in section 1 No.1 till 3
 2. a declaration, if the examinee has not passed an exam in the Master Programme or in a related course of study according to section 1 No. 3 or if the examinee is already in an examination procedure.
- (3) If the examinee is not able to provide the required documents, the examination board may approve, in individual cases, alternative ways to deliver evidence.
- (4) If the required documents are not submitted by the time of the exam registration, the admission to exam may be granted only if the missing documents are submitted by the time of the examination date. The examinee has to provide the missing documents for the exam in question before the evaluation of the exam at the latest.
- (5) The examination committee decides on the admission. Students, who did not fail to submit their registration to exam admission within a month, are approved as candidates.
- (6) The admission can only be withheld, if:
1. The specified requirements set out in section 1 are not fulfilled or
 2. According to section 2 the documents are incomplete or
 3. The examinee has lost the admission right to exam for the GEOENGINE Master Programme or another related course of study at another university or at an equivalent higher-education institution in Germany or is already in an examination procedure.
- (7) The registration deadlines for exams will be made known by the examination office.

§ 10 Module Exams, Study and Examination Achievements

(1) The module exam consists of one or more study and examination achievements.

(2) Study achievements are:

1. Previous achievements
2. Ungraded performance achievements
3. Graded performance achievements

(3) Examination achievements are:

1. Written exams
2. Oral exams
3. Course associated exams

(4) During the time of absence, examination achievements, which are not part of a course, may be performed. This does not apply to study achievements and course associated exams.

(5) If a person to be examined proves by means of a medical certificate that he or she is unable to completely or partially take an exam due to long-term or permanent health problems, the chairman of the examination board may grant an alternative way to provide the examination achievements within an extended working time. This applies to study achievements as well.

§ 11 Course Language

The courses of study are being held in English. The courses and the exam for the module "*Language*" are held in the German language.

§ 12 University Achievements and Course Associated Examinations

(1) Study achievements and course associated examinations are provided study-related together with a lecture. They are to be provided in written or oral form or by successfully participating at a training.

(2) The lecturer will communicate the expected time, the form and content of the study achievements or of the course associated examination at the beginning of the semester to all the students attending the lecture.

§ 13 Oral Examinations

(1) In the oral examination the examinee should prove they are able to recognize the basic principles and competencies of the respective field of examination and are able to understand particular questions within the context.

(2) The oral examination, which is not course associated, will be taken individually or in a group before an examiner and in the presence of an assessor.

(3) The oral examination lasts 20 minutes pro three credit points, minimum 20 minutes up to a maximum of 60 minutes. As long as the exact duration of the examination is not stipulated in the appendix of this examination regulation, it will be established at the suggestion of the examiner through the examination board and will be stated in the module manual. The student will be given this information at the beginning of the semester.

(4) The essential topics and the results of the oral examination are to be recorded in a report signed by the examiner and the assessor. The result of the oral examination is appointed by the examiner after consulting the assessor and is announced to the student at the end of the oral examination.

(5) Students taking the same course of study can be admitted as listeners according to spatial circumstances. However, the admission as listener does not include advisory vote and the announcement of the final grade. Due to important reasons or the examiner's application, the public is excluded.

(6) Each 20 minutes of the oral examination may be replaced with an hour of written examination according to § 14, if this is announced by the institute in question at least four weeks before the examination date and is consented by the chairman of the examination board.

§ 14 Written Examinations

(1) In a written examination the examinee should prove they are able to find solutions based on methods of their field of study for selected questions in a limited amount of time and with limited tools.

(2) Written examinations, which are not course associated, are evaluated by at least one examiner. The written examination is evaluated by two examiners, if – in case of a re-examination – one examiner evaluates it as “not sufficient”. In such a case, one of the examiners must be a university professor or an adjunct professor. The grade is determined from the arithmetical mean of the individual evaluations (§ 15 (2) clause 3). The evaluation process shall be completed within four weeks.

(3) Written examinations last between 60 and 240 minutes. As long as the exact duration of the examination is not stipulated in the appendix of this examination regulation, it will be established at the suggestion of the examiner and will be stated in the module manual. The student will be given this information at the beginning of the semester.

(4) Written examinations may be taken completely or partially as multiple choice exams. The lecturer in question is responsible for the performance requirements and the evaluation. The examination questions must provide reliable results.

(5) Each 60 minutes of the written examination may be replaced with a 20 minutes oral examination according to § 13, if this is announced by the institute in question at least four weeks before the examination date and is consented by the chairman of the examination board.

§ 15 Evaluation of the Study and Examination Achievements, Module Grades

(1) Study achievements under § 10 (2) No 1 and 2 (previous and ungraded performance achievements) are evaluated as “successfully completed” (i.e. “sufficient”; 4.0) or “unsuccessfully completed”.

(2) Study and examination achievements are evaluated by the examiner in question, as follows:

1 = very good: an outstanding achievement

2 = good: an achievement substantially above average requirements

3 = satisfactory: an achievement which corresponds to average requirements

4 = sufficient: an achievement which barely meets the requirements

5 = not sufficient/failed: an achievement which does not meet the requirements

(3) Intermediate values can be formed for a differentiated assessment of the test achievements by the increase or decrease of 0,3 between the grades 1.0 and 4.0. The grades 0.7 and 4.3 are not awarded.

(4) If an exam is to be evaluated by several examiners, the grade will be determined from the arithmetical mean of the individual evaluations; here applies section 3 clause 3.

(5) If a module consists of several examination achievements and graded study achievements, the module grade is determined by the average grade of the individual grades. The evaluation of the individual grades will be regulated in the module manual. For the formation of the grade only the first decimal place after the comma will be regarded; the rest is to be discarded without rounding.

(6) The grades in the modules are:

| | | |
|--|---|------------------------|
| (with an average) up to 1,5 | = | very good, |
| (with an average) of 1,6 up to and including 2,5 | = | good, |
| (with an average) of 2,6 up to and including 3,5 | = | satisfactory |
| (with an average) of 3,6 up to and including 4,0 | = | sufficient |
| (with an average) over 4,0 | = | not sufficient/failed. |

The calculated module grades according to section 3 are added in the brackets.

§ 16 Failing, Withdrawal, Deception, Compliance Deviation

(1) An examination is marked as “not sufficient”, if a candidate misses the examination date without valid reasons or if they withdraw at the beginning of the exam without any justified reasons. The same is applied to written examinations that have not been rendered within the given time. Withdrawing from a registered examination is possible seven days before the examination date without giving any reasons. This does not apply to course associated examinations and re-examinations, which are to be taken within the following examination date.

(2) Reasons for a later withdrawal or failure to attend must be submitted to the board of examiners before the examination date in written form and must be plausible. In case of illness, the student must submit without delay (usually within three working days) a medical certificate to the chairman of the examination board, stating their inability to participate in the exam. This shall also include the duration of the student's inability of participating in the exam. As for the reasons regarding deadlines for the initial application for exams, the repetition of exams, the reasons for failure to attend and the working times for the examination tests the illness of a child for which the student is responsible as well as caring for a family member has the same status as the student's own illness. If the chairman of the examination board agrees upon the stated reasons, the student may be granted another try within the following examination period, unless there is another fixed date of examination; Module performances achieved partly by this date are to be taken into consideration. The examination will be graded “not sufficient” (5,0), if otherwise.

(3) If the student is aware or negligently unaware of the valid reasons to take an exam, he or she is to be seen as guilty and a later withdrawal is in this case not granted. As for the reasons of negligent ignorance is considered the delayed submission of a medical certificate stating the student's inability of participating.

(4) Attempts to influence the results through deception or the use of non-approved tools the student will be graded with “not sufficient” in the respective module or the Master Thesis. The specified sanction in clause 1 is exercised, if the student carries non-approved tools after the delivery of the task. If a student disturbs the proper flow of the examination, the examiner or supervisor can deprive the student from proceeding with the exam; in this case, the student's exam will be graded as “not sufficient”. In more serious cases, the examination board can deprive a student from further provisions of credits.

§ 17 Passing and Failing

(1) A module exam is passed when all examination and graded achievements are evaluated with the grade “sufficient” (4,0) and all previous and ungraded achievements are passed according to § 10 (2) No 1 and 2.

(2) The Master Examination is passed when the Master Thesis is graded with “sufficient” (4,0) and all module examinations have been passed.

(3) In case a module examination or the Master Thesis have not been passed, the student is given a written notification providing information on legal remedies, as well as whether to what extent a repetition of the module exam or of the Master’s thesis is possible. Results of the module exam may succeed in other forms as well.

(4) If the Master Examination is irrevocably not passed, at the student’s request and with presentation of required documents, the examination office will issue a certificate that discloses all successfully completed examinations and their grades, as well as the missing examinations for the Master Examination and notes that the examination has not been passed.

§ 18 Re-examinations

(1) Already passed examinations can not be repeated.

(2) Examinations that have not been passed or classified as not passed may be repeated once.

(3) A second re-examination is only allowed in two cases. A second re-examination of the Master’s thesis is not allowed.

(4) If a re-examination of a written exam has been graded with “not sufficient” (5,0), an oral examination is to be taken as soon as possible and lasts between 20 and 30 minutes. This does not apply in the cases under § 16 section 1 clause 1 and section 4, as well as § 18 section 5, clause 2. In this case the results of the oral re-examination can only be graded with “sufficient” (4,0) or “not sufficient” (5,0). The re-examination is carried out under § 13.

(5) Re-examinations are to be taken within the following examination period at the latest. Otherwise they will be graded with “not sufficient” (5,0). This does not apply in case of leave of absence. If valid reasons are presented, the chairman of the examination board may grant a withdrawal according to §16 section 2. The registration to examination succeeds automatically by the examination office.

§ 19 Recognition of Periods of Study, Study and Examination Achievements

(1) The chairman of the examination board is responsible for the recognition of study and examination achievements. Cases of doubt may be referred to the examination board.

(2) Study and examination achievements, completed at the University of Stuttgart or other state or state-recognised higher-education institutions of the Federal Republic or at a foreign state or state-recognised higher-education institutions, can be recognised, if there are no considerable differences of the replaced achievements. There are no differences, if the content, range and aim of the course correspond substantially to the requirements of the University of Stuttgart. If particular study and examination achievements are missing in order to receive a recognition, the examination board may decide upon additional achievements. In case of examination of the specified requirements, the student can get help from the lecturer in question. Approved equivalence agreements and further agreements between Germany and other states in the context of university partnerships notwithstanding the clause 1 favouring foreign students are to be considered. The recognition may be denied, if more than a half of the credit points to be acquired needs to be recognised.

(3) For the recognition of periods of study and examination results of state-recognised distance learning paragraph 2 shall apply accordingly; Paragraph 2 also applies to periods of study and examination results to other higher-education institutions, especially to technical and engineering schools and officer academies of the former East Germany (DDR).

(4) Failed attempts of study and examination achievements of equivalent courses of study shall be recognised by the examination office, if they are relevant for the Master Examination of the GEOENGINE Master Programme.

(5) If study and examination achievements are recognised, the grades are to be transferred as far as the grading systems are compatible and adapted according to § 16 of the given evaluation scale on calculation of the final grade. If the grading systems are not compatible, the entry "pass" is included. In this case, the calculation of the module grade and the final grade will not be integrated. A notification of the recognition will be marked in the certificate.

(6) In the presence of the conditions in the sections 2 and 3 a claiming of accreditation is possible. The recognition of study and examination achievements are done at request. The application shall be submitted within two semesters after enrolment or upon the return from a semester abroad. A later application is not possible. The student is liable to provide all necessary information and documents in order to get a recognition of the achievements. The body of proof considering that the application does not fulfil the requirements for a recognition is set out in section 1, which deals with recognition procedure.

(7) Periods of study from a previous course of study shall be recognised according to the proven achievements; i.e. the placement in a higher semester depends on the recognised achievements.

II. Master – Examination

§ 20 Purpose of the Master Examination

A Master Examination proves that the student has achieved a broad knowledge and understanding beyond the Bachelor Programme and is able to find solutions based on differential methods for selected questions.

§ 21 Form and Content of the Master Examination

(1) The Master examination consists of:

1. the listed modules in the appendix of this examination regulations
2. the Master Thesis

(2) In the Master Examination the student is allowed to take an exam in three modules others than referred in the examination regulation (additional modules). The results of these exams will be marked in the certificate at request. However, these will not influence the final grade.

§ 22 Master Thesis

(1) The Master Thesis shall prove that the student is capable to solve individually a task in the field of GEOENGINE by applying scientific methods in a limited amount of time, as well as offering a proper presentation of the results. The Master Thesis consists of 30 credit points.

(2) The topic of the Master Thesis is to be set and supervised by any university professor, university lecturer or private lecturer, furthermore any authorised member of the scientific council.

(3) The topic of the Master Thesis may be handed out as soon as the student achieved 60 credit points and a completed admission with conditions is provided. After being given the topic for the Master Thesis by the chairman of the examination board, the student must without delay register it at the examination office. The topic can be turned in only once and within six weeks of the working time.

(4) The Master Thesis can in justified cases be conducted in form of a group work, provided the individual contribution is clearly distinguishable and evaluable regarding the indication of sections, page numbers or other objective criteria that enable a clear distinction of individual working input and if additionally all requirements as per section 1 are fulfilled.

(5) The working time for the Master Thesis is six months. The form and content of the task of the Master Thesis are insofar designed by the supervisor so that it meets the 30 credit points. The deadline may be extended by the examination office at request and without given reasons up to three months.

(6) The Master Thesis is to be written in English. The supervisor may accept at request the submission of the Master Thesis in other languages. In this case, an English version shall be attached. The Master Thesis can be submitted in print and electronic form, if it is relevant for the topic and the supervisor has given consent.

(7) The Master Thesis is to be submitted to the supervisor in three bound formats within the working time as per section 5. Additionally, an electronic format is required. The time of submission has to be recorded. At the submission of the Master Thesis the student is required to insure in written form that:

1. his or her work or group work has been composed independently,
2. none other than the referred sources have been used and cited accordingly,
3. the submitted paperwork is not part of another examination procedure,
4. the thesis has not yet been published neither completely nor partially,
5. the electronic format corresponds to the other copies.

(8) Another component of the Master Thesis is a content presentation between 20 and 30 minutes.

(9) The Master Thesis is generally evaluated by two examiners, of which one is the supervisor who suggested the topic of the thesis as per section 2. At least one examiner must be a university professor or adjunct professor. They evaluate the Master Thesis according to the grading system stated in paragraph 15. The grade shall be formed by the arithmetic average of the individual evaluations. The evaluation process is closed after two months the latest.

(10) In the case of a "not sufficient" grade (5,0), the Master Thesis may be repeated once. However, in case of re-examination, it is possible to return the topic within the deadline set out in section 3, if the student has made no use of this facility initially. The re-examination of the Master Thesis is to be registered at the examination office within six months after the results' legal notification. Otherwise, the re-examination will be graded with "not sufficient" (5,0), unless the student is not responsible for missing of the term. The examination board decides upon it at request.

§ 23 Composition of the Final Grade and Grade Certificate

(1) The final grade of the Master examination consists of the average of the module grades that build up the Master Examination, as well as the grade of the Master Thesis, each one weighted with the number of credit points of the module and of the Master Thesis. Paragraph 15, section 3 and 5 shall apply for the calculation.

(2) Outstanding results will be awarded the grade "passed with merit" (final grade up to and including 1,2).

(3) If the student has passed the Master Examination, he or she will receive a certificate. The certificate contains the final grade, the singular modules and the Master Thesis grade. The final grade is indicated as a decimal grade after the comma. The certificate is signed by the chairman of the examination board. It contains the date of the last performed examination. An English version of the certificate is attached.

(4) The University issues a Diploma Supplement (DS) in accordance to the “Diploma Supplement Model” of the European Union/Europarat/Unesco, which describes the profile of the course of study.

§ 24 University Degree and Master Certificate

(1) Upon passing the Master examination, the student shall be conferred the “Master of Science” Degree (abrv. “M.Sc.”).

(2) Along with the Master Examination transcript, the candidate will be handed a Master Certificate with the date of the document. The degree certificate shall certify the conferment of the academic Master Degree. An English translation will be attached.

(3) The Master Certificate is signed by the Rector of the University of Stuttgart and by the Dean of the Faculty of Aerospace Engineering and Geodesy and issued with the University seal.

III. Final Provisions

§ 25 Access to Examination Files

(1) Within a year after completion of the examination process, the student is granted insight within a reasonable period of time upon their written examinations, the reviews made by the examiners and official examination records.

(2) A written application must be handed beforehand to chairman of the examination board.

§ 26 Invalidity of an Exam

(1) If the student has proved deception at an examination and this fact is revealed after the lending of the certificate, the examination board can change this particular examination grade. Moreover, they can grade the module examination as “not sufficient” and the Master Thesis as “not passed”.

(2) In case the requirements to an examination admission have not been fulfilled with no deception intentions from the student and this fact is revealed after the lending of the certificate, this deficiency shall be healed by passing the examination. If the student has gained admission by intentionally deceitful means, the module examination will be declared as “not sufficient” and the Master Thesis as “not passed”.

(3) Prior to the decision the student has the opportunity to make a statement.

(4) An incorrect examination certificate is to be restored and subsequently a new one to be distributed. As an incorrect certificate is also considered the Master Thesis, if the examination is declared as “not passed” due to deception as per section 1. After a period of five years – starting with the date of the examination certificate –, a decision according to section 1 and 2, clause 2 is excluded.

§ 27 Entry into Force and Final Clauses

(1) These examination regulations shall enter into force with the effect of 1st October 2013. At the same time, the admission regulation for the GEOENGINE Master Programme from 3rd August 2007 (official notice No. 42/2007), last changed on 1st September 2008 (official notice No. 49/2008), ceases to be in force.

(2) Students already registered for the GEOENGINE Master Programme on the date which these regulations enter into force, shall continue their course of study according to the previously valid examination regulations; however, no longer than 31st March 2016.

Stuttgart, 25th March 2013

Prof. Dr.-Ing. Wolfram Ressel
(Rector)

Annex: Overview of the Module Examinations

| No | Module | Compulsory/ Optional | Semester | | | | University Achievements | Examination/ Duration | Credit Points |
|----|--------------------------------|-------------------------|----------|---|---|---|-------------------------|--------------------------|---------------|
| | | | 1 | 2 | 3 | 4 | | | |
| 1 | Advanced Mathematics | P | x | | | | USL-V | PL | 6 |
| 2 | Geomatics Methodology | P | x | | | | USL-V | PL | 15 |
| | | | | x | | | USL-V | PL | |
| 3 | Engineering Geodesy | P | x | x | | | USL-V | PL | 9 |
| 4 | Geodesy | P | x | x | | | USL-V | PL | 9 |
| 5 | Remote Data Acquisition | P | x | x | | | USL-V | PL | 9 |
| 6 | Representation of Geodata | P | | | x | | USL-V | PL | 9 |
| 7 | Integrated Project | P | | x | | | USL | | 6 |
| 8 | Multisensor Integration | W* | | | x | | USL-V | PL | 9 |
| 9 | Satellite Geodesy | W* | | | x | | USL-V | PL | 9 |
| 10 | Navigation | W* | | | x | | USL-V | PL | 9 |
| 11 | Geo-Telematics | W* | | | x | | USL-V | PL | 9 |
| 12 | Information and Contract Law | P | | | x | | BSL | | 3 |
| 13 | German as a Foreign Language** | P | | | | | USL | | 6 |
| 14 | Master Thesis | P | | | | x | | PL | 30 |

*Two optional modules with a total of 18 credit points are to be completed.

**Students that achieved their Bachelor's Degree at a high-education institution within the scope of the university framework law have to exchange the *German as a Foreign Language* Module with one from the catalogue for multidisciplinary key qualifications of the University of Stuttgart with a total of 6 credit points.

Students with sufficient German knowledge can exchange after admission the *German as a Foreign Language* Module with one from the catalogue for multidisciplinary key qualifications of the University of Stuttgart with a total of 6 credit points.

Notes:

Notes on abbreviations:

P = compulsory module; W = optional module

V = Previous achievement; USL = ungraded study achievement; BSL = graded study achievement

PL = examination achievement; S = written examination; M = oral examination

LBP = course related examination

The semesters, when the modules should be attended, are marked with an "x".

In the case of "PL" in the column "Examination/Duration", the duration of the examination has not been fixed, but is to be oriented according to the module handbook.

In the case of "LBP" in the column "Examination/Duration", the form and content of the examination will be announced by the lecturer at the beginning of the semester.