

Unofficial Version of the JSL

of 19th August 2005 (Official Proclamations vol. 36, no. 46, pp 269 - 293)
as amended on 27th September 2019 (Official Proclamations vol. 50, no. 66, pp 348 - 379)

Examination Regulations for the Master of Science (M.Sc.) Program

Appendix B. Subject Specific Requirements for the Master of Science (M.Sc.) Examination Regulations.

Geology

§ 1 Program Outline

- (1) The master's degree program in Geology is research orientated and consecutive.
- (2) The English-taught, internationally oriented master's degree program in Geology offers, depending on the student's choices, an in-depth academic training in one of the four profile lines Mineralogy and Geochemistry, Geomechanics and Tectonics, Geohazards, and Applied Quaternary Geology. The choice of modules offered in the compulsory elective section provides the students with further opportunities for individual specialization in the field of Geology. In the Geology master's program, the students will be taught to do independent academic work and will be provided with in-depth knowledge in site-based and analytical methods, as well as in dealing with data and models. The obligatory participation of students in research seminars and colloquia enables the integration of the students into scientific project work at the Institute of Earth and Environmental Sciences. The successful completion of the master's program qualifies for an academic career in the field of science and research, as well as for a professional career, in particular in geological state offices, local authorities, material testing institutes, insurances or in various industrial sectors (building materials, industrial rocks and minerals, energy and raw materials).

§ 2 Program Entry and Course Work

- (1) Students may only enter the master's program in Geology at the start of the winter semester.
- (2) The master's degree program in Geology consists a workload (Leistungsumfang) equivalent to 120 ECTS credits.

§ 3 Language of instruction and examinations

The courses and examinations in the master's program in Geology will generally be conducted in English. Some of the freely selectable courses and the related examinations can also be conducted, in full or in part, in German.

§ 4 Content of the Program

- (1) The master's program in Geology consists of the compulsory section, the specialization section and the compulsory elective section. The modules available in each section and the respective courses are listed and described in detail in each relevant module handbook.
- (2) In the compulsory section all of the modules listed in Table 1 must be completed with a total workload of 60 ECTS credits.

Table 1: Compulsory Section (60 ECTS Credits)

Module	Type	Contact Hours	ECTS credits	Semester	Assessment
Research Methods in Geosciences	V + E + Sem.	4	5	1	SL PL: exam, written report and oral presentation

Seminar and Colloquium I	Sem.	4	5	1 and 2	SL
Field Trips	F	5	5	1, 2, 3, or 4	SL
Geographic Information Systems	V + E	4	5	2	PL: written report
Geological Project	P	3	5	2, 3, or 4	PL: written report
Seminar and Colloquium II	Sem.	4	5	3 and 4	SL
Master Module			30	4	PL: master's thesis

Abbreviations used in the tables:

Type = type of course; Contact hours = weekly contact hours; Semester = recommended program semester; F = field trips; P = project work; Sem = seminar; E = exercise course; V = lecture; PL = graded assesment (Prüfungsleistung); SL = pass/fail assessment (Studienleistung).

(3) In the specialization section one of the four profile lines Mineralogy and Geochemistry, Geomechanics and Tectonics, Geohazards, and Applied Quaternary Geology must be chosen. Students must choose a profile line at the latest at the time of registration for the first graded assessment in the master's program in Geology. The Subject Examination Committee, can, upon application, approve a change of the profile line once. Within the chosen profile line the modules listed below in the relevant table must be completed with a total workload of 15 ECTS credits. Students are required to successfully complete the module Computing in Geosciences, so that they can attend the modules Near-Surface Geophysics, Earthquakes and Tsunamis, and Hazard, Risk and Prediction.

Table 2: Profile Line Mineralogy and Geochemistry (15 ECTS credits)

Module	Type	Contact Hours	ECTS credits	Semester	Assessment
Analytical Methods I	V + E	4	5	1	SL PL: exam and, written report
Low Temperature Geochemistry	V + E	4	5	2	PL: exam
Ore-Forming Processes	V + E	4	5	2	PL: written report

Table 3: Profile Line Geomechanics and Tectonics (15 ECTS credits)

Module	Type	Contact Hours	ECTS credits	Semester	Assessment
Computing in Geosciences	V + E	4	5	1	PL: written report
Near-Surface Geophysics	V + E + P	4	5	2	SL PL: written report
Tectonics	V + E + Sem.	4	5	2	SL PL: exam and oral presentation

Table 4: Profile Line Geohazards (15 ECTS credits)

Module	Type	Contact Hours	ECTS credits	Semester	Assessment
Computing in Geosciences	V + E	4	5	1	PL: written report
Earthquakes and Tsunamis	V + E	4	5	2	PL: written report
Hazard, Risk and Prediction	V + E	4	5	3	PL: written report

Table 5: Profile Line Applied Quaternary Geology (15 ECTS credits)

Module	Type	Contact Hours	ECTS credits	Semester	Assessment
Engineering Geology and Geotechnics	V + E + Sem.	4	5	2	SL PL: exam, written report and oral presentation
Sedimentary Geology	V + F	4	5	2	SL PL: exam and written report
Earth Management	V + Sem.	4	5	3	SL PL: exam, written report and oral presentation

(4) In the compulsory elective section, modules with a total workload of 45 ECTS credits must be completed from the respective course offer of the master's degree program in Geology, that can be found in the module handbook. In doing so, at least three modules with a total workload of at least 15 ECTS credits that are assigned to the chosen profile line must be completed. Apart from these compulsory elective modules of the four profile lines, the course offer for the compulsory elective section also includes the compulsory modules of the profile lines and further modules from the course offer of the master's degree program in Geology. For each module from the course offer of the master's degree program in Geology for the compulsory elective section, 5 ECTS credits are awarded and each of them is completed with a graded assessment; depending on the respective course design, pass/fail assessments might also have to be completed in the offered modules, additionally. It is guaranteed, that students can choose between different types of graded assessments. Up to 15 of the required 45 ECTS credits can instead also be awarded by completing suitable modules or courses from the course offer of other degree programs offered by the University of Freiburg or the EUCOR partner universities. The Subject Examination Committee decides on the suitability of the modules and courses, in particular on grounds of the relationship to the subject of Geology; the type and scope of the required graded assessments and pass/fail assessments is set by the faculty that offers the modules or courses. A maximum of 5 of the 15 ECTS points available in accordance with Clause 6 can also be earned by the acquisition or deepening of foreign language skills in respective courses offered by the seminars and institutes of the Faculty of Philology of the University of Freiburg (courses for auditors of all faculties); only pass/fail assessments must be completed. Students cannot complete more modules than required for the acquisition of the required 45 ECTS credits in accordance with Clause 1 or the acquisition of the permitted 15 ECTS credits in accordance with Clause 6.

§ 5 Pass/Fail Assessments

Pass/fail assessments may consist of for example laboratory experiments or fieldwork with protocols, presentations or exercises.

§ 6 Course-based Graded Assessments

Written graded assessments are examinations (proctored exams) and written reports. Oral graded assessments are oral examinations (exam interviews) and oral presentations.

§ 7 Repeating Course-based Graded Assessments

- (1) Course-based graded assessments graded “not adequate” (5.0) or considered failed may be repeated once. Furthermore, up to two failed graded assessments can be repeated twice.
- (2) The second repetition of a failed graded assessment usually requires attending the related course again.
- (3) If a student fails a graded assessment in a module from the compulsory elective section, that is not offered in the following academic year, he or she may attend another module in which a graded assessment must be completed, instead of repeating this graded assessment, provided that the repetition is the last attempt to retake the respective graded assessment.

§ 8 Admission to the Master's Thesis

Admission to the master's thesis will only be granted to those who are matriculated in the master's degree program in Geology and who have successfully completed modules with a total workload of at least 60 ECTS credits in this degree program.

§ 9 Master's Thesis

- (1) The master's thesis is to be written within a period of 6 months on a topic from the field of the chosen profile line; the workload amounts to 30 ECTS credits.
- (2) Upon approval of the Subject Examination Committee, the master's thesis may also be written in the form of group work. In every such case, it must be possible for the contribution of each individual student to be clearly distinguished, assessed, and graded through the specification of the number of pages, sections or other objective criteria.
- (3) The master's thesis is usually written in English. Upon request by the student, the Subject Examination Committee may permit the master's thesis to be written in another language, provided that its assessment can be guaranteed.
- (4) Students must submit three typed and bound hard copies of the master's thesis as well as an electronic copy on a predetermined data storage system in the specified file format to the Subject Examination Committee. In case of data or software-related theses, submission of the used source codes and data can be required.
- (5) At least one of the two supervisors of the master's thesis must work full-time at the Faculty of Environment and Natural Resources of the University of Freiburg.

§ 10 Determination of the Overall Grade

The overall grade for the master's examination is calculated from the arithmetic mean of the module grades, weighted according to the amount of ECTS credits they are worth.

§ 11 Subject Examination Committee

The Subject Examination Committee appointed by the Faculty of Environment and Natural Resources in accordance with § 9 of these examination regulations is in charge of all of the master's degree programs offered by the faculty.