

Teaching and Examination Regulations

Faculty of Science

Master's programme in Earth Sciences

Academic year 2023-2024

A. Faculty section

B1. Programme specific section – general provisions

B2. Programme specific section – content of programme

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Section A: Faculty section

1. General provisions

Article 1.1 Applicability of the Regulations

1. These Regulations apply to anyone enrolled in the programme, irrespective of the academic year in which the student was first enrolled in the programme.	Advice OLC, approval FGV (9.38 sub b)
2. These Regulations enter into force on 1 September 2023.	Advice OLC, approval FGV (9.38 sub b)
3. An amendment to the Teaching and Examination Regulations is only permitted to concern an academic year already in progress if this does not demonstrably damage the interests of students.	Advice OLC, approval FGV (9.38 sub b)

Article 1.2 Definitions

The following definitions are used in these Regulations (*in alphabetical order*):

- a. academic year: the period beginning on 1 September and ending on 31 August of the following calendar year;
- b. double degree programme: joint programme in the context of cooperation between Vrije Universiteit Amsterdam and an educational institution within or outside the Netherlands, as to gain a double university degree; of the VU and the educational institution concerned; though not being the same as a 'joint degree programme' according to the art. 7.3c WHW';
- c. EC (European Credit): a course credit with a workload of 28 hours of study;
- d. examination: an assessment of the student's knowledge, understanding and skills relating to a unit of education. The assessment is expressed in terms of a final mark. An examination may consist of one or more partial examinations. A resit always covers the same material as the original examination;
- e. exemption: exemption from an examination/practical/fieldwork based on an earlier successfully completed examination, or knowledge/skills of a similar content, level and scope gained outside higher education;
- f. final examination: a master's programme consists of a master's examination;
- g. joint degree: a degree awarded by an institution together with one or more institutions in the Netherlands or abroad, after the student has completed a study programme (a degree programme, a major or a specific curriculum within a degree programme) for which the collaborating institutions are jointly responsible;
- h. period: a part of a semester;
- i. practical exercise: the participation in a practical training or other educational learning activity, aimed at acquiring certain (academic) skills. Examples of practical exercises are:
 - researching and writing a thesis or dissertation
 - carrying out a research assignment
 - taking part in fieldwork or an excursion
 - taking part in another educational learning activity aimed at acquiring specific skills, or
 - participating in and completing a work placement;

- j. pre-Master's enrollee: person enrolled in a pre-Master's programme, who is not a student from a legal perspective;
- k. programme: the totality and cohesion of the units of education, teaching activities/methods, contact hours, testing and examination methods and recommended literature;
- l. SAP/SLM: the student information system (*Student Lifecycle Management*);
- m. semester: the first (September - January) or second (February - August) half of an academic year;
- n. specialisation: optional route of study within a degree programme indicating a deepening of the context of the programme (e.g. interdisciplinary or multidisciplinary);
- o. student statute: sets out the rights and responsibilities of students on the one hand, and of Vrije Universiteit Amsterdam on the other hand, including those derived from the law and those derived from university regulations. The Executive Board (CvB) officially confirms the student statute once its completeness has been approved by the University Student Council (USC);
- p. study guide: the guide for the study programme that provides further details of the courses, provisions and other information specific to that programme. The Study Guide is available electronically at: <https://studiegids.vu.nl/en#/>;
- q. study monitor: dashboard for students and academic advisors with data of the student and that provides insight into the student's study progress;
- r. subject: see 'unit of education';
- s. substituting course/unit of education: see under b (double degree programme). A course obtained at the educational institute, within the context of cooperation, that is mentioned in the diploma supplement as such; not being an 'exemption';
- t. thesis: a unit comprising research into the literature and/or contributing to scientific research, always resulting in a written report;
- u. track: a study pathway within a broader Bachelor's or Master's degree programme, such as a fully English-language study pathway within a Dutch-language Bachelor's or Master's programme;
- v. unit of education: a unit of study of the programme within the meaning of the WHW;
- w. university: Vrije Universiteit Amsterdam;
- x. WHW: the Dutch Higher Education and Research Act (Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek);
- y. workload: the workload of the unit of education to which an examination applies, expressed in terms of credits = EC credits (ECTS = European Credit and Transfer Accumulation System). The workload for 1 year (1,680 hours) is 60 EC.

The other terms have the meanings ascribed to them by the WHW.

2. Study programme structure

Article 2.1 Structure of academic year and units of education

1. The study programme will be offered in a year divided into two semesters.	Ordinance CvB, see Appendix III
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2. Every semester consists of three consecutive periods. The first two periods each consist of eight weeks, and the final period consists of four weeks.	Ordinance CvB, see Appendix III
3. A unit of education comprises 6 EC or a multiple thereof.	Ordinance CvB, see Appendix III
4. By way of exception to paragraph 3, the Executive Board may in special cases and on request of the Faculty Board, stipulate that a unit of study comprises 3 EC or a multiple thereof.	Ordinance CvB, see Appendix III

3. Assessment and examination

Article 3.1 Signing up for education and examinations

1. Every student must sign up to participate in the units of education of the programme, the examinations and resits. The procedure for signing up is described in an annex to the student statute.	Ordinance CvB, see Appendix III
2. Signing up may only take place in the designated periods.	Ordinance CvB, see Appendix III

Article 3.2 Type of examination

1. At the examiner's request, the Examination Board may permit a different form of examination than is stipulated in the study guide.	Advice OLC, Approval FGV (7.13 l)
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Article 3.3 Oral examinations

1. An oral assessment is public unless the Examination Board determines otherwise.	Advice OLC; approval FGV (7.13 l and n)
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Article 3.4 Determining and announcing results

1. The examiner determines the result of a written examination within fifteen working days. However, the marking deadline for theses and final assignments is twenty working days after submission. The examiner will then immediately ensure that the marks are registered and also ensures that the student is immediately notified of the mark, taking due account of the applicable confidentiality standards.	Ordinance CvB, see Appendix III
2. The examiner determines the result (i.e. mark) of an oral examination as soon as possible, but at the latest within one working day after the examination has finished and informs the student accordingly. The third clause of the first paragraph applies.	Advice OLC; approval FGV (7.13 o)
3. In the case of assessments other than oral or written examinations, the Examination Board determines in advance how and by what deadline the student will be informed of the results.	Advice OLC; approval FGV (7.13 o)

Article 3.5 Examination opportunities

1. a. Per academic year, two opportunities to take examinations will be offered for each unit of education. b. By way of exception to a., the options for retaking practical exercises, work placements and theses are detailed in the relevant work placement manual, course manual of teaching regulations.	Ordinance CvB, see Appendix III
2. The most recent mark will apply in the event of a resit. A resit is allowed for both passed and failed units of study.	Ordinance CvB, see Appendix III

3. The resit for a (partial) examination must not take place within ten working days of the announcement of the result of the (partial) examination being resat.	Advice OLC; approval FGV (7.13 j)
4. The Examination Board may allow a student an extra opportunity to sit an examination if that student: a) lacks only those credits to qualify for their degree; and b) has failed the examination during all the previously offered attempts unless participation in an examination was not possible for compelling reasons. The extra opportunity can only be offered if it concerns a written examination, a paper or a take home examination. This provision excludes the practical exercises and the Master's thesis. Requests for an additional examination opportunity must be submitted to the Examination Board no later than 15 July. If necessary, the method of examination may deviate from the provisions in the study guide.	Ordinance CvB, see Appendix III
5. If a unit of education is no longer offered in the following academic year, at least one additional opportunity will subsequently be provided to sit the examination(s) or parts thereof and a transitional arrangement will be included in section B.	Advice OLC, approval FGV (7.13 j)

Article 3.6 Marks

1. Partial marks are given on a scale from 1 to 10 with no more than one figure after the decimal point.	Ordinance CvB, see Appendix III																																																									
2. A final mark between 5 and 6 will be rounded to the nearest whole number: final marks below 5.50 will be rounded down; final marks of 5.50 or higher will be rounded up. All other final marks will be expressed in whole or half marks. In case the examination of a component consists of two or more parts, each of which are graded separately, the (weighted) mean of these marks (meaning: the final mark) must be rounded off using the following table: <table><tr><th>From</th><th>To</th><th>Grade</th></tr><tr><td>1.00</td><td>1.24</td><td>1.0</td></tr><tr><td>1.25</td><td>1.74</td><td>1.5</td></tr><tr><td>1.75</td><td>2.24</td><td>2.0</td></tr><tr><td>2.25</td><td>2.74</td><td>2.5</td></tr><tr><td>2.75</td><td>3.24</td><td>3.0</td></tr><tr><td>3.25</td><td>3.74</td><td>3.5</td></tr><tr><td>3.75</td><td>4.24</td><td>4.0</td></tr><tr><td>4.25</td><td>4.74</td><td>4.5</td></tr><tr><td>4.75</td><td>5.49</td><td>5.0</td></tr><tr><td>5.50</td><td>6.24</td><td>6.0</td></tr><tr><td>6.25</td><td>6.74</td><td>6.5</td></tr><tr><td>6.75</td><td>7.24</td><td>7.0</td></tr><tr><td>7.25</td><td>7.74</td><td>7.5</td></tr><tr><td>7.75</td><td>8.24</td><td>8.0</td></tr><tr><td>8.25</td><td>8.74</td><td>8.5</td></tr><tr><td>8.75</td><td>9.24</td><td>9.0</td></tr><tr><td>9.25</td><td>9.74</td><td>9.5</td></tr><tr><td>9.75</td><td>10.0</td><td>10</td></tr></table>	From	To	Grade	1.00	1.24	1.0	1.25	1.74	1.5	1.75	2.24	2.0	2.25	2.74	2.5	2.75	3.24	3.0	3.25	3.74	3.5	3.75	4.24	4.0	4.25	4.74	4.5	4.75	5.49	5.0	5.50	6.24	6.0	6.25	6.74	6.5	6.75	7.24	7.0	7.25	7.74	7.5	7.75	8.24	8.0	8.25	8.74	8.5	8.75	9.24	9.0	9.25	9.74	9.5	9.75	10.0	10	Ordinance CvB, see Appendix III
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3. To pass a given course or unit, a final mark of 6 or higher is required.	Ordinance CvB, see Appendix III																																																									

4. The Examination Board can allow the use of symbols rather than numbers, for example: s(atisfactory), g(ood), u(n)s(atisfactory), etc. In case a student does not take part in any examination, the examiner will register the mark 'ns' (c.q. no show).	Ordinance CvB, see Appendix III
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Article 3.7 Exemption

1. At the written request of the student, the Examination Board may exempt the student from taking one or more examination components, if they: - have either passed a unit of education at a university of applied science (hbo) or research university (wo) that is equivalent in terms of content and level; - or have demonstrated through their work and/or professional experience that they have sufficient knowledge and skills with regard to the relevant unit of education.	Advice OLC; approval FGV (7.13 r)
2. The Master's thesis is excluded from this exemption possibility.	Advice OLC; approval FGV (9.38 sub b)
3. - A maximum of 18 EC for a one-year master's programme and 36 EC for a two-year master's programme can be accumulated through granted exemptions. The substituting courses (courses obtained at another educational institute within the context of a double degree, see art. 1.2) are not included. - This regulation does not apply if a student is (simultaneously) enrolled in multiple programmes, which lead to multiple degrees, where courses may be part of both programmes. In such a case, the examination board may deviate from the regulations under a.	Advice OLC; approval FGV (9.38 sub b)

Article 3.8 Validity period for results

1. The validity period of examinations passed and exemption from examinations is unlimited, unless otherwise specified in Section B.	Legal provision
2. The validity period of a partial examination is limited to the academic year in which it was sat or until the end of the unit of study concerned, as stipulated for the relevant unit of study in Section B. In exceptional circumstances, an examiner may deviate from this; this must be stated on Canvas at the start of the unit of education.	Advice OLC; approval FGV (9.38 sub b)

Article 3.9 Right of inspection and post-examination discussion

1. Within twenty working days after the announcement of the results of a written examination, but at least ten working days before the resit opportunity for that examination, the student can submit a request to inspect their assessed work, the questions and assignments set in it, as well as the standards applied for marking. The place and time where students can inspect their work will be announced on VU.nl Dashboard or Canvas in all cases.	Advice OLC; approval FGV (7.13 p and q)
2. If a collective post-examination discussion has been organized, individual post-examination discussions will be held only if the student has attended the collective discussion or if the student was unable to attend the collective discussion through no fault of their own.	Advice OLC; approval FGV (7.13 q)
3. Students who meet the requirements stipulated in paragraph 2 can submit a request for an individual post-examination discussion to the relevant examiner. The discussion shall take place at a time and location to be determined by the examiner within the regular timetable, on campus or online.	Advice OLC; approval FGV (7.13 p and q)

4. Academic student counselling and study progress

Article 4.1 Administration of study progress and academic student counselling

1. The faculty board is responsible for the correct registration of the students' study results. After the assessment of a unit of education has been registered, every student has the right to inspect the result for that component and also has a list of the results achieved at their disposal in VU.nl Dashboard.	Advice OLC; approval FGV (7.13 u)
2. Enrolled students are eligible for academic student counselling. Academic student counselling is in any case provided by a. The Student Counsellor b. Student psychologists c. Faculty academic advisers	Advice OLC; approval FGV (7.13 u)

Article 4.2 Facilities for students with a disability

1. A student with a disability can submit a request via VU.nl Dashboard to qualify for one or more special facilities with regard to teaching, practical exercises and examinations. These facilities will accommodate the student's individual disability as much as possible, but may not alter the quality or degree of difficulty of a unit of education or an examination. In all cases, the student must fulfil the exit qualifications for the study programme.	Advice OLC; approval FGV (7.13 m)
2. The request referred to in the first paragraph must be accompanied by a statement from a doctor or psychologist. If possible, an estimate should be given of the potential impact on the student's study progress. In case of a chronic disability a single (one time) request suffices.	Advice OLC; approval FGV (7.13 m)
3. Students who have been diagnosed with dyslexia must provide a statement from a BIG-, NIP- or NVO-registered professional who is qualified to conduct a psychological evaluation.	Advice OLC; approval FGV (7.13 m)
4. The faculty board, or the person acting on behalf of the faculty board, decides on teaching facilities and facilities regarding logistics. The Examination Board will decide on requests for facilities with regard to examinations.	Advice OLC; approval FGV (7.13 m)
5. In the event of a positive decision in response to a request as referred to in paragraph 1, the student can make an appointment with the academic adviser to discuss the details of the provisions.	Advice OLC; approval FGV (7.13 m)
6. A request for one or more facilities can be refused if it would place a disproportionate burden on the organization or the resources of the faculty or university were it upheld. Any such refusal will be substantiated.	Advice OLC; approval FGV (7.13 m)
7. If the disability justifies an extension of the examination time, the responsible person on behalf of the Examination Board will register in SAP this entitlement to an extension. If a disability justifies other measures to be taken, the academic adviser can take the necessary measures. The student can consult the study monitor to check which facilities have been granted to them.	Advice OLC; approval FGV (7.13 m)
8. The decision as referred to in paragraph 5 may specify a limited validity of the facilities granted.	Advice OLC; approval FGV (7.13 m)

5. Hardship clause

[Article 5.1 Hardship clause](#)

In instances not regulated by the Teaching and Examination Regulations or in the event of demonstrable extreme unreasonableness or unfairness, the faculty board responsible for the study programme will decide, unless the matter concerned is the responsibility of the Examination Board.	Advice OLC; approval FGV (9.38 sub b)
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Section B1: Programme specific – general provisions

6. General programme information and characteristics

Article 6.1 Study programme information

1. The programme Earth Sciences, CROHO number 66986 is offered on a full-time basis.	Advice OLC; approval FGV (7.13 i)
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Article 6.1a Deviant size of units of education

By way of derogation from art. 2.1.3, the units of education listed below have a size that is not 6 EC or a multiple thereof:			Approval OLC (art. 7.13 sub e), approval CvB
Course code	Name course	EC	
AM_1242	NIOZ Summer Course	3	
AM_1264	Designing Interdisciplinary Research	3	
AM_450229	Introduction Field Excursion	3	

Article 6.2 Teaching formats used and modes of assessment

1. The degree programme uses the following teaching formats: The programme uses the teaching formats as specified in the study guide.	Advice OLC; approval FGV (7.13 x)
2. The degree programme uses the following modes of assessment: The modes of assessment used per unit of education are specified in the study guide.	Advice OLC; approval FGV (7.13 l)

Article 6.3 Academic student counselling

1. The programme offers the following counselling in addition to the student counselling mentioned in Section A: - In addition to the overall programme coordinator, specialization coordinators are available for academic counselling. - Students have the opportunity to use a personal mentor (staff member involved in teaching in the programme) for additional academic counselling.	Advice OLC; approval FGV (7.13 u)
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7. Further admission requirements

Article 7.1 Intake date(s)

1. The programme starts on 1 September.	Advice OLC; approval FGV (9.38 sub b)
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Article 7.2 Admission requirements

1. Admission to the Master's programme is possible for an applicant who has a Bachelor's degree obtained at an institution of academic higher education, which demonstrates the following knowledge, understanding and skills: - knowledge: Earth Sciences (BSc level geology/geochemistry/geophysics) and natural sciences (chemistry, physics, mathematics) - understanding: Common processes in Earth Sciences	Advice OLC, approval FGV (9.38 sub b)
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c. skills: - General academic skills including analytical and critical thinking, English language skills, and scientific writing skills demonstrated for example by a higher education BSc thesis or equivalent. - Basic level computer programming skills. - Basic level GIS skills. Individuals who have completed a BSc degree in Earth Sciences at Vrije Universiteit Amsterdam or Utrecht University meet the requirements referred to in this article (7.2.1)	
2. Not applicable	Advice OLC; approval FGV (9.38 sub b)
3. Applicants with a Bachelor's degree obtained at an institution outside the Netherlands may be asked for additional methods to prove that they meet the admission requirements.	Advice OLC; approval FGV (9.38 sub b)
4. Not applicable (concerns Dutch language programmes)	Advice OLC; approval FGV (9.38 sub b)
5. Applicants should demonstrate that they have a sufficient level of proficiency in English by meeting at least one of the following standards, no more than two years before the start of the programme: - (academic) IELTS: minimum 6.5 - TOEFL paper based test: minimum 580 - TOEFL internet based test : minimum 92	Advice OLC; approval FGV (9.38 sub b)
6. Applicants who: - completed an English-taught secondary or higher education degree in Canada, the United States, the United Kingdom, Ireland, New Zealand or Australia; or - have earned a Bachelor's or Master's degree in an English-taught programme accredited by NVAO in the Netherlands; or - have earned a Bachelor's or Master's degree in an accredited English-taught programme in another member state of the European Union; or - have obtained a Cambridge Certificate of Proficiency in English (CPE) or a Cambridge Certificate of Advanced English (CAE) with at least a score of A, B or C; or - have earned a VWO diploma or equivalent diploma in which English of a comparable level is required are exempt from the requirements referred to in paragraph 5.	Advice OLC; approval FGV (9.38 sub b)
7. The Admission Board will investigate whether the applicant meets the admission requirements.	Advice OLC; approval FGV (9.38 sub b)

Article 7.3 Selection criteria

1. In addition to the admission requirements referred to in Article 7.2, the Faculty board also sets (at least two of) the following selection criteria: Not applicable -	Advice OLC; approval FGV (9.38 sub b)
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Article 7.4 Pre-Master's programme

1. Applicants with a Bachelor's degree from a university of applied sciences (HBO) or a Bachelor's degree from a research university (WO) who wish to enter the programme but do not fulfill the admission requirements as stipulated in Article 7.2 can request admission to a tailor-made, individual pre-Master's programme, defined by the Admission Board based on deficiencies identified in the applicant's prior education. Article 2 of these regulations does not apply to admission to a bridging or pre-Master's programme. The provisions of sections A and B only apply to the extent that they are described in Article 7.4. Information about the programme from part B2 applies, insofar as it concerns the units of education from the pre-Master's programme.	Advice OLC; approval FGV (9.38 sub b)
2. Applicants must, in addition to paragraph 1 above, also satisfy the following requirements regarding: Not applicable a.	Advice OLC; approval FGV (9.38 sub b)
3. A candidate must demonstrate that they meet the language requirements, as specified in Article 7.2.	
4. The pre-Master's programme has 30 EC credits and consists of units that are determined individually for each applicant based on deficiencies in their prior education. The following terms also apply: a. If the pre-Master's enrollee is completing an individualized pre-Master's programme, this is to be communicated to the enrollee in writing. b. The Examination Board can, if the pre-Master's enrollee submits a written request, exempt the enrollee from one or more examinations. c. Article 3.5.4 does not apply to pre-Master's enrollees.	Advice OLC; approval FGV (9.38)
5. Evidence that the pre-Master's programme has been completed successfully will entitle the enrollee to admission to the relevant Master's programme in the following academic year.	Advice OLC; approval FGV (9.39)
6. The pre-Master's programme needs to be completed within one academic year	Advice OLC; approval FGV (9.39)

8. Examinations and results

Article 8.1 Sequence of examinations

1. Students may participate in the examinations of the units of education listed below only if they have passed the examination or examinations for following units of education: Not applicable	Advice OLC; approval FGV (7.13 h, s & t)
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Article 8.2 Validity period for results

1. The validity period of the examinations and exemptions from examinations below, is limited as follows: Not applicable	Advice OLC; approval FGV (7.13 k)
2. A student may request the Examination Board to extend the validity of an exam. If the student's knowledge is demonstrably outdated, or if the student's skills and insights are demonstrably outdated, the Examination Board may impose a supplementary examination, impose a replacement examination or refuse to extend the period of validity.	Legal provision

3. In situations where a limited period of validity applies, the period of validity of examinations may be extended in the event of extenuating circumstances as stipulated in WHW Article 7.51, paragraph 2, with at least the period of allocated financial assistance specified in WHW Article 7.15, paragraph 1.	Legal provision
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Section B2: Programme specific – content of programme

9. Programme objectives, tracks/specialisations, exit qualifications and language

Article 9.1 Workload

1. The programme has a workload of 120 EC.	Advice OLC; (7.13 a)
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Article 9.2 Tracks and/or specialisations

The programme has the following tracks and/or specialisations: - Earth and Climate - Geology and Geochemistry - Global Environmental Change and Policy After completing a first year in one of these three specializations, it is possible to switch, in year 2, to the following additional specializations: - Education - Science Communication	Approval OLC; (7.13 a)
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Article 9.3 Programme objective

The programme aims at educating participants so that they: 1. Have specific and fundamental theoretical and practical knowledge of Earth science, notably within their field of specialization. Insight into Earth processes requires further deepening of basic knowledge, understanding of a broad spectrum of spatial and temporal scales and an approach focusing on the interaction between the various Earth science and relevant socio-economic domains. 2. Have experience in carrying out research independently. This experience is gradually developed through exposure to research and interaction with active researchers, and ultimately through active participation in research. This occurs in such a way that it allows students to consciously decide whether they prefer to continue their studies in order to obtain a PhD degree, or take up positions outside academia. 3. Are able to function in their discipline at an academic level, both mentally and in daily practice; the programme stimulates the social and personal development of students by motivating societal awareness, independence, communicative behavior and cooperation. 4. Recognize the need to continue their education by following relevant new developments in the field of Earth sciences to maintain a state-of-the-art knowledge basis. 5. Are able to start and successfully complete a PhD thesis, or to successfully compete on the (inter)national labour market for positions at an academic level in government or government-related institutions, private sector, or elsewhere. 6. Have insight into the broad historical, philosophical and socio-economic context of the discipline, and aspects concerning the intellectual integrity, and moral and ethical dimensions of scientific research and its applications.	Advice OLC; (7.13 a)
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Article 9.4 Exit qualifications

1.	At all events, a graduate of the study programme will have knowledge and understanding in the field of Earth Sciences.	Approval OLC (7.13 c)														
2.	Notwithstanding the provisions of paragraph 1, a graduate of a specific specialization will have the following knowledge and understanding:	Approval OLC (7.13 b)														
<table><tr><th colspan="2">Exit qualifications for the 'Geology and Geochemistry' specialization</th></tr><tr><td>A. Knowledge and insight</td><td><i>The graduate has profound knowledge of and insight in:</i></td></tr><tr><td>A1: The graduate has specialized theoretical and practical knowledge of the science of Geology and Geochemistry</td><td> - regional geological systems across the globe and their settings relationships between geological and geochemical processes in Earth's interior (subduction, metamorphism, magmatism, tectonics) and related surface expressions and sedimentary deposits; - processes of heat and material transport within the earth's interior, and of large-scale mountain building and deformation; - interpretation techniques of subsurface geophysical and geological data; - techniques used in high-temperature geochemistry - fieldwork skills, i.e. linking theoretical knowledge and factual information to field observations; </td></tr><tr><td>B. Application of knowledge and insight in practice</td><td><i>The graduate is able to:</i></td></tr><tr><td>B1: The graduate is experienced in carrying out research</td><td> - formulate a problem based on raw data and/or data from literature and design a scientific approach for researching and solving the problem; - set up and execute a scientific investigation by selecting and applying fieldwork, analogue and/or numerical modelling and/or laboratory techniques associated with the subject of specialization. - develop conceptual and physical models suited for testing hypotheses; </td></tr><tr><td>B2: The graduate is able to apply scientific knowledge to problems raised in society</td><td> - discern the various geological and geochemical processes that are relevant to society; - use his/her knowledge and insight to debate the role that geology and geochemistry can play in several key aspects of society. </td></tr><tr><td>C. Critical judgement</td><td><i>The graduate can:</i></td></tr></table>			Exit qualifications for the 'Geology and Geochemistry' specialization		A. Knowledge and insight	<i>The graduate has profound knowledge of and insight in:</i>	A1: The graduate has specialized theoretical and practical knowledge of the science of Geology and Geochemistry	- regional geological systems across the globe and their settings relationships between geological and geochemical processes in Earth's interior (subduction, metamorphism, magmatism, tectonics) and related surface expressions and sedimentary deposits; - processes of heat and material transport within the earth's interior, and of large-scale mountain building and deformation; - interpretation techniques of subsurface geophysical and geological data; - techniques used in high-temperature geochemistry - fieldwork skills, i.e. linking theoretical knowledge and factual information to field observations;	B. Application of knowledge and insight in practice	<i>The graduate is able to:</i>	B1: The graduate is experienced in carrying out research	- formulate a problem based on raw data and/or data from literature and design a scientific approach for researching and solving the problem; - set up and execute a scientific investigation by selecting and applying fieldwork, analogue and/or numerical modelling and/or laboratory techniques associated with the subject of specialization. - develop conceptual and physical models suited for testing hypotheses;	B2: The graduate is able to apply scientific knowledge to problems raised in society	- discern the various geological and geochemical processes that are relevant to society; - use his/her knowledge and insight to debate the role that geology and geochemistry can play in several key aspects of society.	C. Critical judgement	<i>The graduate can:</i>
Exit qualifications for the 'Geology and Geochemistry' specialization																
A. Knowledge and insight	<i>The graduate has profound knowledge of and insight in:</i>															
A1: The graduate has specialized theoretical and practical knowledge of the science of Geology and Geochemistry	- regional geological systems across the globe and their settings relationships between geological and geochemical processes in Earth's interior (subduction, metamorphism, magmatism, tectonics) and related surface expressions and sedimentary deposits; - processes of heat and material transport within the earth's interior, and of large-scale mountain building and deformation; - interpretation techniques of subsurface geophysical and geological data; - techniques used in high-temperature geochemistry - fieldwork skills, i.e. linking theoretical knowledge and factual information to field observations;															
B. Application of knowledge and insight in practice	<i>The graduate is able to:</i>															
B1: The graduate is experienced in carrying out research	- formulate a problem based on raw data and/or data from literature and design a scientific approach for researching and solving the problem; - set up and execute a scientific investigation by selecting and applying fieldwork, analogue and/or numerical modelling and/or laboratory techniques associated with the subject of specialization. - develop conceptual and physical models suited for testing hypotheses;															
B2: The graduate is able to apply scientific knowledge to problems raised in society	- discern the various geological and geochemical processes that are relevant to society; - use his/her knowledge and insight to debate the role that geology and geochemistry can play in several key aspects of society.															
C. Critical judgement	<i>The graduate can:</i>															

C1: The graduate is able to independently and critically judge (own) information	- understand professional literature and critically assess its quality and usefulness for own research; - understand the limitations of data, models, instruments and measurement techniques and how to take these into account for critically evaluating measurements.	
C2: The graduate is able to think within a multidisciplinary framework	- think in a multidisciplinary way and recognize the importance of (sub)disciplines; - connect different types of factual information - understand the limits of geology and geochemistry research, i.e. realize that for some issues additional expertise should be brought in.	
C3: The graduate has an understanding of his/her personal stronger and weaker points	- understand his/her personal stronger and weaker points, affinities, development potential and preferences in relation to the discipline chosen and the related professional potential.	
D. Communication	<i>The graduate is able to:</i>	
D1: The graduate is able to transfer knowledge and skills related to his/her subject area to other persons and is able to adequately reply to questions and problems posed within society	- clearly present information (on data, method, analysis, findings) both written and orally to a public of specialists; actively and constructively participate in discussions in the field of geology and geochemistry; - convey scientific findings to a public of non-specialists (i.e. colleagues from different disciplines, stakeholders, general public).	
E. Learning Skills	<i>The graduate is able to:</i>	
E1: The graduate has developed learning skills that enable him/her to educate and develop him/herself further in a specific subject area	- get acquainted with specific subject areas related to geology and geochemistry and link this to his/her knowledge; - recognize the local reality of complex issues; - independently collect, analyze and summarize information on geological and geochemical problems to extend his/her current knowledge.	
E2: The graduate functions in his/her discipline at an academic level, both mentally and in daily practice	- compete in the international job market for positions related to geological and geochemical processes in academia, - government, non-government organizations, private organizations, or	

	elsewhere.	
Exit qualifications for the ‘Earth and Climate’ specialization		
A. Knowledge and insight	<i>The graduate has profound knowledge of and insight in:</i>	
A1: The graduate has specialized theoretical and practical knowledge of the science of Earth and Climate	- climate systems Earth surface processes that operated both in the past and the present, and the interactions of the different components of the climate system; - global changes that occur at the earth surface at present and the interaction with climate and environmental variation at different spatial and temporal scales; - the processes that regulate the transfer of energy, water and trace gases between the land surface and the atmosphere; - mathematics, physics, chemistry and statistics in relation to geo-environmental sciences. - the proxies employed in palaeoclimate and geo-ecosystem research.	
B. Application of knowledge and insight	<i>The graduate is able to:</i>	
B1: The graduate is experienced in carrying out research	- formulate a problem based on raw data and/or data from literature and design a scientific approach for researching and solving the problem; - set up and execute a scientific investigation by selecting and applying the appropriate techniques to collect, process and analyze data); - develop conceptual and physical models suited for testing hypotheses; - programme, validate and calibrate Earth System models.	
B2: The graduate is able to apply scientific knowledge to problems raised in society	- discern the various physical and biogeochemical processes that contribute to (future) climate change and their impact on sustainability; - use his/hers knowledge and insights in the political debate on the role that future climate developments play in society.	
C. Critical judgement	<i>The graduate can:</i>	
C1: The graduate is able to independently and critically judge (own) information	- understand professional literature and judge its quality and usefulness for own research; - understand the limitations of data, models, instruments and measurement techniques and how to take these into account for critically evaluating measurements;	

C2: The graduate is able to think within a multidisciplinary framework	- think in a multidisciplinary way and recognize the importance of (sub)disciplines and connect different types of factual information - understand the limits of climate science , i.e. realize that for some issues other expertise should be brought in and there is a need for interdisciplinary co-operation;	
C3: The graduate has an understanding of his/her personal stronger and weaker points	- understand his/her personal stronger and weaker points, affinities, development potential and preferences in relation to the discipline chosen and the related professional potential.	
D. Communication	<i>The graduate is able to:</i>	
D1: The graduate is able to transfer knowledge and skills related to his/her subject area to other persons and is able to adequately reply to questions and problems posed within society	- clearly present information (on data, method, analysis, findings) both written and orally to a public of specialists; - actively and constructively participate in discussions on climate issues; - convey scientific findings to a public of non-specialists (i.e. colleagues from different disciplines, stakeholders, general public);	
E. Learning Skills	<i>The graduate is able to:</i>	
E1: The graduate has developed learning skills that enable him/her to educate and develop him/herself further in a specific subject area	- get acquainted with subject areas related to earth and climate and link this to his/her knowledge; - recognize the local reality of complex issues , independently collect, analyze and summarize information on climate and earth surface subjects to extend his/her current knowledge;	
E2: The graduate functions in his/her discipline at an academic level, both mentally and in daily practice	- compete in the international market for positions related to climate science and earth surface processes in academia, government, non- government organizations, private organizations, or elsewhere.	
Exit qualifications for the 'Global Environmental Change and Policy' specialization		
A. Knowledge and insight	<i>The graduate has:</i>	
A1: The graduate has specialized theoretical and practical knowledge of global environmental change and related policies and solutions.	- A profound knowledge of climate systems and ecosystems, environmental governance and environmental economics processes of, and solutions for, global environmental change. - Good knowledge of the interdisciplinary research process and related methodologies for analysis of environmental change. - Basic knowledge of global environmental change and associated policy/governance challenges. Depending on the focus of electives in this track, the graduate has profound knowledge of: Energy systems, their policy implications and policy solutions; - The water cycle and related risks, policy	

		- implications and policy solutions; - Basic functions of biodiversity and ecosystem services, the related challenges, policy implications and policy solutions.	
	B. Application of knowledge and insight	<i>The graduate is able to:</i>	
	B1: The graduate is experienced in carrying out research	- Apply and understand evaluation tools for policy assessment, such as stakeholder analysis, cost- benefit analysis, and multi-criteria analysis. - Apply GIS decision making techniques and modelling approaches on relevant global environmental change problems, and understand the interactions at the disciplinary interfaces.	
	B2: The graduate is able to apply scientific knowledge to problems raised in society	- Bridge the gap between industry, academia, government agencies and NGO's in dealing with climate and energy systems, water resource management, land use and ecosystem services. - Understand the positions in the political debate on the challenges and solutions for global environmental change.	
	C. Critical judgement	<i>The graduate can:</i>	
	C1: The graduate is able to independently and critically judge (own) information	- Understand professional literature and judge its quality and usefulness for own research. - Understand the limitations of data, models, instruments and measurement techniques and how to take these into. - Account for critically evaluating measurements.	
	C2: The graduate is able to think within a multidisciplinary framework	- Think in a multidisciplinary way and recognize the importance of (sub)disciplines and connect different types of factual information. - Understand and integrate various disciplinary perspectives with a view towards interdisciplinary perspectives.	
	C3: The graduate has an understanding of his/her personal stronger and weaker points	- Understand his/her personal stronger and weaker points, affinities, development potential and preferences in relation to the discipline chosen and the related professional potential.	
	D. Communication	<i>The graduate is able to:</i>	

D1: The graduate is able to transfer knowledge and skills related to his/her subject area to other persons and is able to adequately reply to questions and problems posed within society	- Clearly present information (on data, method, analysis, findings) both written and orally to a public of specialists; - Actively and constructively participate in discussions on climate issues. - Convey scientific findings to a public of non-specialists (i.e. colleagues from different disciplines, stakeholders, general public).	
E. Learning Skills	<i>The graduate is able to:</i>	
E1: The graduate has developed learning skills that enable him/her to educate and develop him/herself further in a specific subject area	- Get acquainted with subject areas related to global environmental change and policy. - Recognize the local reality of complex issues (i.e. livelihoods, cultural and gender aspects, political preferences). - Independently collect, analyze and summarize information on policy and governance options to extend his/her current knowledge.	
E2: The graduate functions in his/her discipline at an academic level, both mentally and in daily practice	- Compete in the international market for positions related to global sustainability in academia, government, non-government organizations, private organizations, or elsewhere.	
3. Language proficiency may be taken into account in the assessment of examinations.		Approval OLC (7.13 c)

Article 9.5 Language of instruction

1. The language of instruction is English, with the exception of the Education specialization for which the language of instruction is Dutch.	Approval OLC (9.18)
2. The 'Gedragcode vreemde taal' (Code of conduct foreign languages) applies.	Ordinance CvB, see Appendix III

10. Curriculum structure

Article 10.1 Composition of the programme

1. The programme comprises at least a package of compulsory components and an individual Master's thesis or academic internship.	Ordinance CvB, see Appendix III
2. Additionally the programme can offer: - Elective courses covering a broad range of specialist topics in Earth and environmental sciences and hydrology - Practical exercises - Company (external) internship	Advice OLC; (7.13 a)
3. Units of education are categorized as specialized (400), research oriented (500) and highly specialized (600) level.	Ordinance CvB, see Appendix III

Article 10.2 Compulsory units of education

A detailed description per unit of education can be found in the Study Guide.

Article 10.2.1 Compulsory units of education | Research specializations

Specialization Earth and Climate				
Unit of education	course code	nr of EC	level	Advice OLC; (7.13 a)
Research Project Earth and Climate	AM_1265	24	600	
Year 1				
Landscape Dynamics	AM_450331	6	400	
Designing Interdisciplinary Research	AM_1264	3	400	
Year 2				
Master Thesis Earth and Climate	AM_1228	27	600	
Constrained choice (students must obtain at least 36 EC of the courses below)				
Climate Systems	AM_1124	6	400	
Advanced Spatial Analyses	AM_1197	6	500	
Orogenesis	AM_450190	6	400	
Marine Geology & Paleoclimatology	AM_450330	6	400	
Climate Modelling	AM_450004	6	400	
Environmental Remote Sensing	AM_450145	6	400	
Practical: Paleoclimate Change	AM_1144	6	400	
Imaging and Assessing Landscapes	AM_1183	6	400	
Climate Dynamics and Processes	AM_1230	6	400	
Reflection Seismics for Geologists	AM_450170	6	400	
Basin Tectonics and Subsurface Resources	AM_1298	6	400	
Source to Sink	AM_1302	6	400	
Global Biogeochemical Cycles	AM_450332	6	400	

Specialization Geology and Geochemistry				
Unit of education	course code	nr of EC	level	Advice OLC; (7.13 a)
Research Project Geology and Geochemistry	AM_1267	24	600	
Year 1				
Mantle Properties	AM_1211	6	400	
Orogenesis	AM_450190	6	400	
Basin Tectonics and Subsurface Resources	AM_1298	6	400	
Source to Sink	AM_1302	6	400	
Multidisciplinary Uncertainties	AM_1249	6	400	
Designing Interdisciplinary Research	AM_1264	3	400	
Year 2				
Geology & Geochemistry Field Excursion	AM_450229	3	400	
Master Thesis Geology and Geochemistry	AM_1186	27	600	

Specialization Global Environmental Change and Policy				
Unit of education	course code	nr of EC	level	Advice OLC; (7.13 a)
Research Project GEC&P	AM_1266	15	400	
Year 1				
Climate Systems	AM_1124	6	400	
Challenges and Solutions GEC&P	AM_1234	6	400	
Environmental Policy for GEC&P	AM_1241	6	400	
Land Use Change and Ecosystems	AM_1235	6	400	

Methods of Global Environmental Change	AM_1236	6	400
Designing Interdisciplinary Research	AM_1264	3	400
Earth science observation research methods	AM_1285	6	400
<i>Year 2</i>			
Climate Impacts & Policy	AM_1240	6	400
Advanced Spatial Analyses	AM_1197	6	500
Master Thesis GEC&P	AM_1286	30	600
<i>Year 1 constrained choice (choose one of the two below)</i>			
Environmental Economics for GEC&P	AM_1232	6	400
Economics of Environmental Policy Instrument Design	E_STR_EEPID	6	400
<i>Year 2 constrained choice ((students must obtain at least 18 EC of the courses below)</i>			
Water Risks	AM_1210	6	400
Ecological Data Analysis	AM_1225	6	500
Ecohydrology	AM_450014	6	400
Sustainable Energy Systems	AM_468018	6	400
Climate Hydrological Processes	AM_1196	6	400
Geothermal Energy	AM_450409	6	500
Catchment Biogeochemistry	AM_1279	6	400
Catchment Hydrology	AM_1278	6	400
Energy and Climate Governance	AM_1155	6	400
Science and Communication	AM_470587	6	500
Science Journalism	AM_471014	6	500
Capita Selecta Master ES	AM_1174	6	400
Multidisciplinary Uncertainties and risk	AM_1249	6	400
Water Politics and Governance	AM_1192	6	400
Governance of Ecosystem Services	AM_468025	6	400
Integrated Modeling in Hydrology	AM_1165	6	400
Plastic & Chemical Pollution	AM_1259	6	400

Article 10.2.2 Compulsory units of education | Education

Specialization Earth and Climate or Geology and Geochemistry			
Unit of education	course code	nr of EC	level
<u>Earth Sciences content</u> (60 EC)			
Sociale geografie II (in Dutch)	AM_1051	12	400
Research Project from one of the tracks	AM_1265 or AM_1267	24	600
Compulsory Courses from same track as chosen research project		15	
Article 10.3 Elective unit of educations		9	
<u>Educational content</u> (60 EC)			
Master Leraar VHO Aardrijkskunde	OM1_LVHOAK		
Didactiek 1	O_MLDIDAC_1	6	400
Didactiek 2	O_MLDIDAC2	9	400
Didactiek 3	O_MLDIDAC_3	9	400
Praktijk 1	O_MLPRAK_1	6	400
Praktijk 2	O_MLPRAK_2	9	400
Praktijk 3	O_MLPRAK_3	15	400

Peergroup 1	O_MLPEERGR_1	0	400
Peergroup 2	O_MLPEERGR_2	0	000
If the student is exempted for parts of the specialization in Education, the exempted EC have to be compensated with other mastercourses of the programme			
If the student wishes to take a different course than the units of study listed, advance permission must be obtained in writing from the Examinations Board.			

Article 10.2.3 Compulsory units of education | Science Communication

Specialization Earth and Climate or Geology and Geochemistry			
Unit of education	course code	nr of EC	level
<u>Earth Sciences content</u> (60 EC)			
Research Project from one of the tracks	AM_1265 or AM_1267	24	600
Compulsory Courses from same specialization as chosen research project		27	400, 500
Article 10.3 Elective unit of educations		9	
<u>Science Communication content</u> (42 EC)			
Science and Communication	AM_470587	6	500
Research Methods for Analyzing Complex Problems	AM_1182	6	400
<i>Constrained choice</i> (choose one of the two below)			
Research Internship Science Comm.	AM_1162	30	600
Reflective Practice Int. SC. Comm.	AM_1163	30	600
<i>Constrained choice</i> (18 EC required: choose 3 out of 4)			
Science in Dialogue	AM_1002	6	500
Communication, Org. and Management	AM_470572	6	500
Science Museology	AM_470590	6	500
Science Journalism	AM_471014	6	500

Specialization Global Environmental Change and Policy			
Unit of education	course code	nr of EC	level
<u>Earth Sciences content</u> (60 EC)			
Research Project	AM_1266	15	600
Compulsory Courses from same track as chosen research project		33	400, 500
Designing Interdisciplinary Research	AM_1264	3	400
From Article 10.3 Elective unit of educations		9	
<u>Science Communication content</u> (42 EC)			
Science and Communication	AM_470587	6	500
Research Methods for Analyzing Complex Problems	AM_1182	6	400
<i>Constrained choice</i> (choose one of the two below)			
Research Internship Science Comm.	AM_1162	30	600
Reflective Practice Int. SC. Comm.	AM_1163	30	600
<i>Constrained choice</i> (18 EC required: choose 3 out of 4)			
Science in Dialogue	AM_1002	6	500

Communication, Org. and Management	AM_470572	6	500	
Science Museology	AM_470590	6	500	
Science Journalism	AM_471014	6	500	

Article 10.3 Elective units of education

1. The student can take one or more of the following electives without prior consent from the Examination Board:				Advice OLC; (7.13 a)
Name of unit of education	course code	nr of EC	level	
<u>Earth and Climate</u>				
<i>Year 2</i>				
Humanity and Climate	AM_1057	6	500	
Groundwater Processes	AM_1164	6	400	
Advanced Geodynamics and Tectonics	AM_1173	6	400	
Capita Selecta Master Earth Sciences	AM_1174	6	400	
Water Politics and Governance	AM_1192	6	400	
Climate Hydrological Processes	AM_1196	6	400	
Mantle Properties	AM_1211	6	400	
NIOZ Marine Masters Summer Course	AM_1242	3	400	
Multidisciplinary Uncertainties and Risks	AM_1249	6	400	
Catchment Hydrology	AM_1278	6	400	
Catchment Biogeochemistry	AM_1279	6	400	
Ecohydrology	AM_450014	6	400	
Extension Master Thesis Earth Sciences	AM_450149	12	400	
Diagenesis of Sedimentary Rocks	AM_450169	3	500	
Geothermal Energy	AM_450409	6	500	
Sustainable Energy Systems	AM_468018	6	400	
Governance of Ecosystem Services	AM_468025	6	400	
Science and Communication	AM_470587	6	500	
Science Journalism	AM_471014	6	500	
Biological Oceanography	AMU_0021	6	500	
Energy and Climate Change; Science, Policy and Economics	X_428568	6	400	
Sustainable Mineral Resources	AM_1289	6	400	
<u>Education and Communication</u>				
Causes and Consequences of Environmental Change	AM_1049	6	400	
Sociale geografie II	AM_1051	12	400	
Humanity and Climate	AM_1057	6	500	
Climate Systems	AM_1124	6	400	
Practical: Paleoclimate Change and Environmental Impacts	AM_1144	6	400	
Advanced Geodynamics and Tectonics	AM_1173	6	400	
Capita Selecta Master Earth Sciences	AM_1174	6	400	
Metropole Ecology	AM_1199	6	500	
Climate Modelling	AM_450004	6	400	
Ecohydrology	AM_450014	6	400	
Environmental Remote Sensing	AM_450145	6	400	
Diagenesis of Sedimentary Rocks	AM_450169	3	500	
Reflection Seismic for Geologists	AM_450170	6	400	
Metamorphic Geology	AM_450176	6	500	
Magmatic Processes	AM_450189	6	500	
Advanced Planetary Science	AM_450273	6	500	
Marine Geology & Paleoclimatology	AM_450330	6	400	
Global Biogeochemical Cycles	AM_450332	6	400	

Geothermal Energy	AM_450409	6	500	
Sustainable Energy Systems	AM_468018	6	400	
Science and Communication	AM_470587	6	500	
Science Journalism	AM_471014	6	500	
2. If the student wishes to take a different unit of education than listed, advance permission must be obtained in writing from the Examinations Board.				Advice OLC; (7.13 a)

Article 10.4 Practical exercise

The following components can be considered as practical exercises:				Approval OLC (7.13 d)
Name of unit of education	course code	nr of EC	level	
Practical: Paleoclimate Change	AM_1144	6	400	

Article 10.5 Participation in practical training and tutorials

1. In the case of practical exercises, students must attend 100% of the practical sessions unless specified otherwise in the study guide text of the corresponding course. Should they attend less than 100%, they must repeat the practical exercise, or the Examination Board may issue one or more supplementary assignments.	Approval OLC (7.13 d)
2. In the case of tutorials, students must attend 100% of the sessions unless specified otherwise. Should they attend less than 100%, they must repeat the tutorial, or the Examination Board may issue one or more supplementary assignments.	Approval OLC (7.13 d)

11. Evaluation and transitional provisions

Article 11.1 Evaluation of the education

1. The education provided in this programme is evaluated in accordance with the document 'Kwaliteitszorg Onderwijs BETA'.	Approval OLC (7.13 a1)
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Article 11.2 Transitional provisions

By way of departure from the Teaching and Examination Regulations currently in force, the following transitional provisions apply for students who started the programme under a previous set of Teaching and Examination Regulations: - Courses that were listed in previous TER'S that were applicable in the year in which the student first registered for the programme, but that are not part of the current TER anymore and/or were replaced by (a) different course(s) can be incorporated in a student's programme, if permission is granted by the Examination Board. - For the Education specialization (curriculum changes per 2023-2024): 1. For students who started before 1 September 2023, the 2022/2023 curriculum still applies in 2023/2024. This means that Praktijkonderzoek 1 (3 EC) is a compulsory unit of education, and that Didactiek 2 is a 6 EC unit of education. 2. Until August 2024, it is possible to finish Praktijkonderzoek 1 (3 EC) and Didactiek 2 (6 EC) from the old curriculum. At the end of semester 1 and at the end of semester 2, retakes will be offered at the regular moments.	Advice OLC (7.13 a)
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3. Praktijkonderzoek 1 (3 EC) will be offered as a self study module in semester 1 for the students who have not yet followed (all) the sessions of Praktijkonderzoek 1 (3 EC). 4. Students who have not yet followed (all) the sessions of Didactiek 2 (6 EC) can join the sessions of the new unit of education Didactiek 2 (9 EC). 5. Per September 2024, all students can only graduate according to the exit qualifications and units of education of the new curriculum.	
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Approval of the Programme Committee of the curriculum structure (submitted via UAS), on 16-12-2022.

Advice and approval by the Programme Committee (with the exception of the curriculum structure), on 30-5-2023.

Approved by the Faculty Joint Assembly, on 23-06-2023.

Adopted by the board of the Faculty of Sciences on 23-06-2023.

Appendix I

Overview of articles that must be included in the OER

Based on Article 7.13, paragraph 2, of the WHW and other Articles of the Act.

Section A: Faculty section

2. Study programme structure	
Article 2.1 Structure of academic year and units of education	7.13 paragraph 2 sub e
3. Assessment and examination	
Article 3.2 Type of examination	7.13 paragraph 2 sub h, l, j
Article 3.3 Oral examinations	7.13 paragraph 2 sub l, n
Article 3.4 Determining and announcing results	7.13 paragraph 2 sub o
Article 3.5 Examination opportunities	7.13 paragraph 2 sub h, j
Article 3.7 Exemption	7.13 paragraph 2 sub r
Article 3.8 Validity period for results	7.13 paragraph 2 sub k
Article 3.9 Right of inspection and post-examination discussion	7.13 paragraph 2 sub p, q
4. Academic student counselling and study progress	
Article 4.1 Administration of study progress and academic student counselling	7.13 paragraph 2 sub u
Article 4.2 Facilities for students with a disability	7.13 paragraph 2 sub m

Section B1: Programme specific – general provisions

6. General programme information and characteristics	
Article 6.1 Study programme information	7.13 paragraph 2 sub i, r
Article 6.2 Teaching formats used and modes of assessment	7.13 paragraph 2 sub l, x
[option:] Article 6.3 Academic student counselling	7.13 paragraph 2 sub u
7. Further admission requirements	
Article 7.2 Admission requirements	7.30b paragraph 1
Article 7.3 Selection criteria	7.30b paragraph 2, 5
8. Examinations and results	
Article 8.1 Sequence of examinations	7.13 paragraph 2 sub h, s, t
[option 1:] Article 8.2 Validity period for results	7.13 paragraph 2 sub k
[option 2:] Article 8.2 Validity period for results	7.13 paragraph 2 sub k

Section B2: Programme specific – content of programme

9. Programme objectives, tracks/specialisations, exit qualifications and language	
Article 9.1 Workload	7.13 paragraph 2 sub g
Article 9.2 Tracks and/or specialisations	7.13 paragraph 2 sub a
Article 9.3 Programme objective	7.13 paragraph 2 sub a
Article 9.4 Exit qualifications	7.13 paragraph 2 sub b, c
Article 9.5 Language of instruction	9.18 (implementation expected in 2020)
10. Curriculum structure	
Article 10.1 Composition of the programme	7.13 paragraph 2 sub a
Article 10.2 Compulsory units of education	7.13 paragraph 2 sub a
[Optional] Article 10.3 Elective units of education	7.13 paragraph 2 sub a
[Optional] Article 10.4 Practical exercise	7.13 paragraph 2 sub d
Article 10.5 Participation in practical training and tutorials	7.13 paragraph 2 sub d
11. Evaluation and transitional provisions	
Article 11.1 Evaluation of the education	7.13 paragraph 2 sub a1
Article 11.2 Transitional provisions	7.13 paragraph 2 sub a

Appendix II**Overview of advisory and approval rights of Programme Committees (OLC) and Faculty Joint Assembly (FGV)***(English below)*

Onderwerpen Onderwijs – en Examenregeling (OER) 7.13 lid 2 WHW	FGV		OplC	
	I	A	I	A
a. de inhoud van de opleiding en van de daaraan verbonden examens				
a1. de wijze waarop het onderwijs in de desbetreffende opleiding wordt geëvalueerd				
b. de inhoud van de afstudeerrichtingen binnen een opleiding				
c. de kwaliteiten op het gebied van kennis, inzicht en vaardigheden die een student zich bij beëindiging van de opleiding moet hebben verworven				
d. waar nodig, de inrichting van praktische oefeningen				
e. de studielast van de opleiding en van elk van de daarvan deel uitmakende onderwijseenheden				
f. de nadere regels, bedoeld in de artikelen 7.8b, zesde lid, en 7.9, vijfde lid (BSA)				
g. ten aanzien van welke masteropleidingen toepassing is gegeven aan artikel 7.4a, achtste lid (verhoogde studielast)				
h. het aantal en de volgtijdelijkheid van de tentamens alsmede de momenten waarop deze afgelegd kunnen worden				
i. de voltijdse, deeltijdse of duale inrichting van de opleiding				
j. waar nodig, de volgorde waarin, de tijdvakken waarbinnen en het aantal malen per studiejaar dat de gelegenheid wordt geboden tot het afleggen van de tentamens en examens				
k. waar nodig, de geldigheidsduur van met goed gevolg afgelegde tentamens, behoudens de bevoegdheid van de examencommissie die geldigheidsduur te verlengen				
l. of de tentamens mondeling, schriftelijk of op een andere wijze worden afgelegd, behoudens de bevoegdheid van de examencommissie in bijzondere gevallen anders te bepalen				
m. de wijze waarop studenten met een handicap of chronische ziekte redelijkerwijs in de gelegenheid worden gesteld de tentamens af te leggen				
n. de openbaarheid van mondeling af te nemen tentamens, behoudens de bevoegdheid van de examencommissie in bijzondere gevallen anders te bepalen				
o. de termijn waarbinnen de uitslag van een tentamen bekend wordt gemaakt alsmede of en op welke wijze van deze termijn kan worden afgeweken				
p. de wijze waarop en de termijn gedurende welke degene die een schriftelijk tentamen heeft afgelegd, inzage verkrijgt in zijn beoordeelde werk				
q. de wijze waarop en de termijn gedurende welke kennis genomen kan worden van vragen en opdrachten, gesteld of gegeven in het kader van een schriftelijk afgenomen tentamen en van de normen aan de hand waarvan de beoordeling heeft plaatsgevonden				
r. de gronden waarop de examencommissie voor eerder met goed gevolg afgelegde tentamens of examens in het hoger onderwijs, dan wel voor buiten het hoger onderwijs opgedane kennis of vaardigheden, vrijstelling kan verlenen van het afleggen van een of meer tentamens				
s. waar nodig, dat het met goed gevolg afgelegd hebben van tentamens voorwaarde is voor de toelating tot het afleggen van andere tentamens				
t. waar nodig, de verplichting tot het deelnemen aan praktische oefeningen met het oog op de toelating tot het afleggen van het desbetreffende tentamen, behoudens de bevoegdheid van de examencommissie vrijstelling van die verplichting te verlenen, al dan niet onder oplegging van vervangende eisen				
u. de bewaking van studievoortgang en de individuele studiebegeleiding				
v. indien van toepassing: de wijze waarop de selectie van studenten voor een speciaal traject binnen een opleiding, bedoeld in artikel 7.9b, plaatsvindt (excellentietraject <u>binnen</u> een opleiding)				
x. de feitelijke vormgeving van het onderwijs				
alle overige onderwerpen die in de OER zijn geregeld maar die niet als zodanig zijn genoemd in art. 7.13 WHW onder a t/m x.				

De lettering komt overeen met de lettering van artikel 7.13 lid 2 WHW

Afkortingen:

FGV: Facultaire Gezamenlijke Vergadering

OplC: Opleidingscommissie

I: Instemmingsrecht

A: Adviesrecht

Appendix II (English)**Overview of advisory and approval rights of Programme Committees (OLC) and Faculty Joint Assembly (FGV)**

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Article 7.13, paragraph 2, of the Higher Education and Research Act	FGV		OplC	
	I	A	I	A
a. content of the programme and associated examinations				
a1. the manner in which teaching and education in the relevant programme are evaluated				
b. the content of the specialisations offered as part of the programme				
c. the programme's final attainment levels with regard to the knowledge, understanding and skills				
d. where applicable, the design of practical exercises				
e. the workload of the programme and of each of its constituent educational units				
f. the detailed rules referred to in Article 7.8b, sixth paragraph, and Article 7.9, fifth paragraph (recommendation on continuation of studies)				
g. the Master's programmes to which Article 7.4a, eighth paragraph, applies (elevated workload)				
h. the number and sequence of examinations and the times at which these can be taken				
i. the full-time, part-time or work-study structure of the programme				
j. where necessary, the order, and the periods in which and the number of times per academic year that the opportunity to sit examinations and final degree assessments is given				
k. where necessary, the period of validity for pass grades awarded for examinations, notwithstanding the authority of the Examination Board to extend this period of validity				
l. whether examinations are administered in oral, written or another form, notwithstanding the authority of the Examination Board to decide otherwise				
m. the way in which students with a disability or chronic health condition are given a reasonable opportunity to take the examinations				
n. the public nature of oral examinations, subject to the right of the Examination Board to determine otherwise in special cases				
o. the period within which the results of an examination must be announced, together with details of whether this period can be altered and if so in what way				
p. the way in which and the period within which students who have taken an examination are given the opportunity to inspect their marked work				
q. the way in which and the period within which information can be provided about the questions asked and exercises given in the framework of a written examination and about the standards used for assessment				
r. the grounds on which the Examination Board could grant exemption from the taking of one or more examinations to students who have previously passed examinations in higher education or have acquired knowledge or skills outside higher education				
s. where necessary, the stipulation that students must pass certain examinations as a condition for admission to other examinations				
t. where necessary, the obligation to take part in certain practical exercises with a view to admission to the examination in question, subject to the authority of the Examination Board to grant exemption from this obligation, with or without the imposition of alternative requirements				
u. the monitoring of academic progress and individual student support and guidance				
v. where applicable, the manner in which students are selected for a special track within a programme as referred to in Article 7.9b (excellence track within a programme)				
x. the actual design of the education provided				
<i>All other matters that are regulated in the Academic and Examination Regulations but which are not mentioned as such in Article 7.13 of the Higher Education and Research Act under points a to x.</i>				

Abbreviations used:

FGV: Faculty Joint Assembly
 OplC: Programme Committee
 I: right of approval
 A: right of advice

Appendix III**Ordinances VU CvB and Binding Guidelines (richtlijn)**

Section A, article:	Concerns:	CvB ordinance / guideline
2.1.1, 2.1.2	Year planning two semesters 8-8-4 (uniform year calendar VU-UvA)	29-9-2008 (period 2009-2015) 22-05-2014 (period 2016-2025)
2.1.3, 2.1.4	Units of education	Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017
3.1	Signing up for education and examinations	CvB ordinance 30-09-2010, prior consent USR.
3.4.1	Determination and publication of the results (1) Grading deadline exams ten working days (2) Theses twenty working days	(1) Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017 (2) Quality demand 11 from the VU assessment policy, CvB ordinance 15-05-2012
3.5.1	Two possibilities to take examinations per year	Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017
3.5.2	Retake: Most recent grade is valid A pass can be retaken	Taken from the UvA guidelines, as part of the harmonization, CvB ordinance 24-02-2014
3.5.4	One-time extra resit in relation to examination requirement	Included in (prior) model OER 16-17 following a request from committee O&O and adopted by CvB op 27-10-2015
3.6	Grades	CvB ordinance 30-09-2010, with University council's consent. As a result of harmonization UvA, the guideline: 5.5 is a pass, has been added. CvB ordinance 24-02-2014.
Section B1, article:	Concerns:	CvB ordinance / guideline
7.2	Admission criteria; at least WO Bachelor's degree	Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017
7.3	Selection criteria; type of criteria	Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017
Section B1, article:	Concerns:	CvB ordinance / guideline
10.1	Composition programme	Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017
10.2	Categorization of units	Richtlijn Bachelor en Masteronderwijs, revised on 6 June 2017

Appendix IV

Article 2.1 of the Higher Education and Research (Implementation) Act (Uitvoeringsbesluit)

(English below)

1 De persoonlijke omstandigheden bedoeld in de artikelen 7.8b, derde lid, en 7.9, derde lid, van de wet, zijn uitsluitend:

- a. ziekte van betrokkene,
- b. lichamelijke, zintuiglijke of andere functiestoornis van betrokkene,
- c. zwangerschap van betrokkene,
- d. bijzondere familie-omstandigheden,
- e. het lidmaatschap, daaronder begrepen het voorzitterschap, van:
 - 1. bij universiteiten: de universiteitsraad, faculteitsraad, het orgaan dat is ingesteld op grond van de medezeggenschapsregeling, bedoeld in artikel 9.30, derde lid, onderscheidenlijk artikel 9.51, tweede lid, van de wet, het bestuur van een opleiding of de opleidingscommissie, alsmede het lidmaatschap van het bestuur van een stichting die blijkens haar statuten tot doel heeft de exploitatie van voorzieningen, behorende tot de studentenvoorzieningen, dan wel van een daarmee naar het oordeel van het instellingsbestuur gelet op de taak gelijk te stellen orgaan,
 - 2. bij hogescholen: de medezeggenschapsraad, deelraad, studentencommissie of opleidingscommissie.
- f. andere in de regelingen, bedoeld in de artikelen 7.8b, zesde lid, en 7.9, vijfde lid, van de wet door het instellingsbestuur aan te geven omstandigheden waarin betrokkene activiteiten ontplooit in het kader van de organisatie en het bestuur van de zaken van de instelling,
- g. het lidmaatschap van het bestuur van een studentenorganisatie van enige omvang met volledige rechtsbevoegdheid, dan wel van een vergelijkbare organisatie van enige omvang, bij wie de behartiging van het algemeen maatschappelijk belang op de voorgrond staat en die daartoe daadwerkelijk activiteiten ontplooit.
- h. andere in de onderwijs- en examenregeling, bedoeld in artikel 7.13 van de wet, op grond van artikel 7.13, tweede lid, onderdeel f, van de wet, vast te leggen persoonlijke omstandigheden,
- i. andere dan in de onderdelen a tot en met h bedoelde persoonlijke omstandigheden die, indien zij door het instellingsbestuur niet in de beoordeling zouden worden betrokken, zouden leiden tot een onbillijkheid van overwegende aard.

2 Het instellingsbestuur kan voor de toepassing van het eerste lid, onderdeel g, nadere regels vaststellen omtrent het aantal bestuursleden dat ten hoogste per organisatie per studiejaar in aanmerking komt, zomede omtrent welke bestuursfuncties in aanmerking komen.

Appendix IV (English)**Article 2.1 of the Higher Education and Research (Implementation) Act**

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1. The extenuating personal circumstances referred to in Article 7.8b, paragraph 3 and 7.9, paragraph 3 of the Act (WHW) are limited to:

- a. illness of the person concerned,
- b. physical, sensory or other impairment of the person concerned,
- c. pregnancy of the person concerned,
- d. extenuating family circumstances,
- e. membership, including the chairmanship of:

- 1. universities: the university council, faculty council, the body established under the participation regulation referred to in Article 9.30, paragraph 3, or Article 9.51, paragraph 2, of the Act, the programme management or the programme committee, or membership on the board of a foundation whose bylaws allow for the exploitation of facilities belonging to the student services, or an equivalent body with regard to its activities in the opinion of the board of the institution,
- 2. universities of applied sciences: the participation council, district council, student committee or programme committee,

- f. other circumstances to be designated by the board of the institution in the regulation as referred to in Article 7.8b, paragraph 6, and Article 7.9, paragraph 5, of the Act in which the person concerned engages in activities within the framework of the organization and the administration of the affairs of the institution,
- g. membership on the board of a student organization of a certain size with full legal capacity, or a similar organization of a certain size, whose primary task regards general societal interest and which actually develops activities for this purpose,
- h. other personal circumstances set out in the Teaching and Examination Regulations as referred to in Article 7.13 of the Act, pursuant to Article 7.13, paragraph 2, clause f of the Act,
- i. personal circumstances other than those referred to in a – h above which, if overlooked by the governing bodies of the institution, would lead to an obviously unfair outcome.

2. The institutional board may, for the purposes of the first paragraph, part g, establish specific rules regarding the maximum number of eligible board members per organization per academic year, as well as the eligible administrative offices.