Teaching and Examination Regulations

Faculty of Science
Master's programme in Biomedical Technology and Physics

Academic year 2025-2026

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 2025.	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. EC (European Credit): a course credit with a workload of 28 hours of study;

c. 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. An examination can be completed in writing, orally or in another way;

d. final examination a Master's programme consists of a Master's examination;

e. internship period spent working in professional practice as part of a study programme;

f. 1. 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;

2. double degree: partnership between a programme of a Dutch educational institution with a foreign educational institution, whereby students complete all or part of both study programmes and obtain two diplomas on the basis of agreements regarding the mutual recognition of the programme (replacement courses);

g. period: a part of a semester;

h. practical exercise: 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;

i. programme: the totality and cohesion of the units of education, teaching activities/methods, contact hours, testing and examination methods and recommended literature;

j. SAP/SLM: the student information system (*Student Lifecycle Management*);

k.	semester:	the first (September - January) or second (February - August) half of an academic year;
l.	specialisation:	optional route of study within a degree programme indicating a deepening of the context of the programme (e.g. interdisciplinary or multidisciplinary);
m.	student	person studying;
n.	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);
o.	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#/;
p.	study monitor: (*studiemonitor*):	dashboard for students and academic advisors containing data pertaining to the student, including the student's study progress;
q.	subject:	see t. 'unit of education';
r.	thesis	a unit comprising research into the literature and/or contributing to scientific research, always resulting in a written report;
s.	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;
t.	unit of education:	a unit of study of the programme within the meaning of the WHW;
u.	university:	Vrije Universiteit Amsterdam;
v.	WHW:	the Dutch Higher Education and Research Act (Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek);
w.	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
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 education 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)

Article 3.3 Oral examinations

1. No more than one student will be examined orally at a time, unless specified otherwise in part B for the relevant unit of education.	Advice OLC; approval FGV (7.13 l and n)
2. A second examiner is present when an oral examination is being held, unless the Examination Board has determined otherwise. The oral examination takes place at a time and location to be determined by the examiner within the regular timetable, on campus or online. At the request of the student, and with the approval of the examiners, an audio recording can be made. Should the second examiner not be available unexpectedly, an audio recording of the oral exam can be made. This audio recording is retained by the university for the retention period applicable for examinations.	Advice OLC; approval FGV (7.13 l and n)

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 no longer than 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 or 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 education.	Ordinance CvB, see Appendix III

3. The resit for an (partial) examination may not take place within ten working days of the announcement of the results for the original (partial) examination. Exceptions are only possible in period 6.	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, 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) grades 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 5.5, rounded down; final marks of 5.50 or higher, rounded up. All other final marks will be expressed in whole or half marks.	Ordinance CvB, see Appendix III
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(at)is(factory), 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

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: a. have either passed a unit of education at a university or university of applied sciences (HBO) or a research university (WO) that is equivalent in terms of content and level; or b. 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. 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 are not included. b. 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 review their graded examination.	Advice OLC; approval FGV (7.13 p and q)
2.	Students can view the questions and assignments set in the written examination, and the standards applied when assessing the examination, within the period specified in 3.9.1.	Advice OLC; approval FGV (7.13 q)
3.	The examiner determines whether the inspection takes place collectively or individually. In all cases, the time and place of the inspection is announced in the course manual or learning environment.	Advice OLC; approval FGV (7.13 q)
4.	Students are entitled to feedback on their academic performance. The manner in which this is provided in each unit of education is described in the course manual.	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 or impairment

1.	Students with a disability or impairment , 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 or impairment 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 organisation 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 or impairment 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 or impairment 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)

Section B1: Programme-specific section

6. General programme information and characteristics

Article 6.1 Study programme information

1. The programme Biomedical Technology and Physics CROHO number 60800 is offered on a full-time basis.	Advice OLC; approval FGV (7.13 u)

Article 6.2 Teaching formats used and modes of assessment

1. The programme uses the teaching formats as specified in the study guide.	Advice OLC; approval FGV (7.13 x)
2. 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: - Master's coordinator - Academic adviser	Advice OLC; approval FGV (7.13 u)

7. Further admission requirements

Article 7.1 Intake date(s)

1. The Master's programme starts on 1 September.	Advice OLC, Approval FGV (9.38 sub b)

Article 7.2 Admission requirements

1. Admission to the Master's programme is possible for an applicant who has obtained a Bachelor's degree at an institution of academic higher education, which demonstrates the following knowledge, understanding and skills: a. knowledge: mathematics (at least 21 ects) and physics (at least 21 ects) with content comparable with these courses in the bachelor Medische Natuurwetenschappen; b. understanding: mathematics (at least 21 ects) and physics (at least 21 ects) with content comparable with these courses in the bachelor Medische Natuurwetenschappen; c. skills: academic communication skills (6 ects) and computer programming and simulations (at least 12 ects), and experimental skills at least (12 ects).	Advice OLC, approval FGV (9.38 sub b)
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: - IELTS Academic: an overall score of at least 6.5; IELTS test has a validity of 2 years. - TOEFL iBT: an overall score of at least 92; TOEFL test has a validity of 2 years. - Cambridge Certificate of Proficiency in English (CPE) or Cambridge Certificate of Advanced English (CAE) with an overall score of at least 180. Cambridge tests are valid indefinitely.	Advice OLC, approval FGV (9.38 sub b)
6.	Applicants who have completed one of the following meet the English language requirement and therefore are exempted from taking an English language test (as mentioned in the section 5) if: - a secondary education or higher education degree fully taught in English has been completed in Australia, Canada (except Quebec province), Ireland, New Zealand, Singapore, South Africa, the United Kingdom or the United States of America; - a Bachelor's or Master's degree in an English-taught programme accredited by NVAO in the Netherlands has been earned; or - a Bachelor's or Master's degree in an accredited fully English-taught university programme has been earned in a member state of the European Union/ European Economic Area; or - a VWO diploma or equivalent diploma in which the course of English of a comparable level is required has been earned; or - have obtained a Bachelor's degree in Medische Natuurwetenschappen.	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)

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 fulfil the admission requirements as stipulated in Article 7.2 can request admission to the pre-Master's programme. 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.	Not applicable	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.	Advice OLC; approval FGV (9.38 sub b)

4. The pre-Master's programme has 30 credits and consists of the following units: a. is determined for each student individually. The following terms also apply: a. If a pre-Master's student completes an individualised pre-Master's programme, this is to be communicated to that student in writing. b. The Examination Board can, if the pre-Master's student submits a written request, exempt the student from one or more examinations. c. Article 3.5.4 does not apply to pre-Master's students.	Advice OLC; approval FGV (9.38)
5. Evidence that the pre-Master's programme has been completed successfully will entitle the student to admission to the relevant Master's programme in the following academic year. A pre-Master's programme must be completed within one academic year.	Advice OLC; approval FGV (9.38 b)

8. Examinations and results

Article 8.1 Sequence of examinations

1. Students may participate in interim examinations and/or practical exercises of the components below only if they have passed the interim examination or examinations for the components mentioned hereinafter: - The major and minor project can be started only after passing at least 24 EC of master courses, unless the Examination Board decides otherwise.	Advice OLC; approval FGV (7.13 h, s & t)

Article 8.2 Validity period for results

1. The validity period of the examinations and exemptions from examinations below is limited, as follows: a. No further specific provisions	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 understanding 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 7.51, paragraph 1.	Legal provision

Article 8.3 Degree

Degree Students who have successfully completed their Master's final Examination are awarded a Master of Science degree (Msc). The degree awarded is stated on the diploma.

Requirements for NVKF certificate

Special provisions for the Dutch Society for Clinical Physics certificate.

Students who complete the Bachelor's programme Medische Natuurwetenschappen and the Research Variant of the Master's programme in Biomedical Technology and Physics are entitled to a certificate indicating that their prior education meets the requirements of the Dutch Society for Clinical Physics for admission to the post-graduate programme in Clinical Physics. Specifically, they must meet the relevant

requirements for the Bachelor's programme (as listed in the Teaching and Examination Regulations for that programme) and the following requirements for the Master's programme:

- Next to the compulsory courses From Physics to Physiology and Biomedical optics, 30 ECTS from the following electives must be completed:
    - Advanced Medical Image Processing
    - Soft Condensed Matter and Biological Physics
    - Parameter Estimation in Medical and Biological Sciences
    - Advanced Biophysics
    - Tracer kinetic modelling
    - Advanced 3D & 4D Imaging
    - Advanced Spectroscopy
    - Advanced MRI
    - Deep learning for medical imaging
- The student must complete a Major Research Project BMTP in the field of Medical Physics.
- The student must complete a Colloquium / Literature Thesis BMTP on a physics topic.

Any deficiencies in the student's Bachelor's programme can be eliminated by choosing additional specific elective courses in consultation with the Master's coordinator and the Examination Board.

The BMTP Examination board provides this certificate after consultation of BMTP master's coordinator.

Please note that the above described requirements are subject to approval by the NVKF and may change during the validity period of this TER.

Section B2: Programme-specific section – 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.	Approval OLC; (7.13 g)

Article 9.2 Tracks and/or specialisations

1. The programme has the following tracks and/or specializations: - Research variant; - Communication variant*; - Education variant; - Society Oriented variant*. *The Communication and Society Oriented variant are being discontinued as formal specializations. No new students are admitted into these specializations from academic year 2025-2026.	Approval OLC; (7.13 a)

Article 9.3 Programme objective

The programme aims at: that students should acquire sufficient knowledge, skills and insight within the field of Biomedical Technology and Physics, and any related disciplines, to be able to operate as an independent professional at an academic level, and to be a suitable candidate for a subsequent course of study leading to a career in research or development. Another aim of the programme is to develop students' understanding of the interrelationships between academic disciplines, as well as their sense of social responsibility.	Advice OLC (7.13 a)

Article 9.4 Exit qualifications

1. At all events, a graduate of the study programme: a. has a sound theoretical and practical understanding of modern Biomedical Technology and Physics (including the requisite knowledge of other disciplines); b. has a thorough knowledge of theoretical and experimental methods, as well as research experience in at least one sub-field of Biomedical Technology and Physics; c. is capable, within a reasonable period of time, of becoming conversant in other sub-fields of the discipline; d. is capable of formulating a work plan for research within Biomedical Technology and Physics, on the basis of a realistic research question; e. is capable of analyzing and formulating research results, and of drawing conclusions from them; f. is capable of writing a report, or an academic paper for publication in an international journal, and of participating in a discussion on a topic related to the field of study in question; g. is capable of studying the professional literature (including international publications) in relevant sub-fields, and of utilizing the relevant content;	Approval OLC (7.13)

h. is capable of applying knowledge of Biomedical Technology and Physics within a wider, multidisciplinary context; i. is capable of dealing with the ethical, safety and environmental aspects of Biomedical Technology and Physics; j. is capable of taking on posts for which knowledge and research skills in the field of Biomedical Technology and Physics are required; k. has sufficient knowledge of and insight into the social role of Biomedical Technology and Physics to decide on a responsible choice of profession and professional practice; l. is capable of cooperating with others, of imparting knowledge to others, and of delivering a lecture both to specialists and to a wider audience. The programme emphasizes: - the student's personal development, - the student's sense of social responsibility, and - the student's communication skills in the English language.	
2. Without prejudice to the provisions of paragraph 1, a graduate of the following specializations will have the following knowledge and understanding:- Research variant The graduate: a. is capable of independently designing, conducting and assessing experiments and the associated controls within a given period of time; b. is capable of contextualizing the results and conclusions obtained, within the framework of results obtained by others; c. is capable of formulating a perspective on the development of scientific research within the field in question; d. is capable of quantitatively and qualitatively analyzing medical, biological, chemical and physical processes, entering the data into existing models (or models yet to be developed), and presenting the results at various levels of abstraction; e. must possess insight into the role of Biomedical Technology and Physics in a sustainable society. Communication and Education variants The graduate can: a. independently acquire new knowledge of the subject in the area of communication and education, and can apply this in professional situations within the sphere of communication/education; b. impart any knowledge and insights obtained, verbally and in writing, both in educational contexts and to wider audiences. Society Oriented variant The graduate can: a. develop a perspective on the contributions that scientific knowledge and methods can potentially make to social problems related to the field in question;	Approval OLC (7.13 b)

b. distil a research question from this perspective that is geared towards solutions; c. implement such questions in the form of targeted research; d. interpret and present data obtained from analyses conducted at different scales and different levels of abstraction; e. cooperate with others in the context of a multidisciplinary project team.	

Article 9.5 Language of instruction

1. The language of instruction is English.	Approval OLC (9.18)
2. The 'Gedragscode vreemde taal' (Code of conduct for foreign languages) applies.	VU policy

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 work placement.	Ordinance CvB, see Appendix III
2. Additionally the programme can offer: - required educational units - practical components - optional subjects (electives)	Advice OLC (7.13 a)
3. Units of education are categorised as specialised (400), research-oriented (500) and highly specialised (600) level.	Ordinance CvB, see Appendix III

Article 10.2 Compulsory units of education

Research Specialisation

Compulsory Courses in Research Specialisation

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

Unit of education	**course code**	**EC**	**level**	Advice OLC; (7.13 a)
Year 1				
From Physics to Physiology	X_430112	6	400	
Biomedical Optics	XM_41014	6	400	
Scientific Writing in English for BMTP	X_420563	3	400	
Ethics in Life Sciences	AM_470707	3	400	
Current Clinical Issues	XM_0064	6	400	
Colloquium / Literature thesis	XM_422611	6	500	
Constrained choice: select 30 EC				
Soft Condensed Matter and Biological Physics	X_420167	6	400	
Advanced Medical Image Processing	X_422610	6	400	
Parameter Estimation Sciences applied to Medical & Biological Sciences	X_432631	6	500	
Tracer Kinetic Modelling	XM_0014	6	400	
Advanced Biophysics	X_422583	6	400	
Advanced 3D and 4D Medical Imaging	X_428569	6	500	

Advanced MRI	XMU_0031	6	500	
Advanced Spectroscopy	X_432767	6	500	
Deep learning for Medical Image Analyse	XM_0151	6	500	
Entrepreneurship in Science and Technology	XMU_0066	6	400	
Year 2				
Major research Project BMTP	XM_422613	39	600	
Minor research project	XM_422614	21	500	

Education Specialisation

Compulsory Courses in Education Specialisation

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

Unit of education	**course code**	**EC**	**level**	Advice OLC; (7.13 a)
Year 1				
From Physics to Physiology	X_430112	6	400	
Biomedical Optics	XM_41014	6	400	
Scientific Writing in English for BMTP	X_420563	3	400	
Ethics in Life Sciences	AM_470707	3	400	
Major research Project BMTP for CSE	XM_0065	30	600	
Constrained Choice: Select 12 EC				
Current Clinical Issues	XM_0064	6	400	
Soft Condensed Matter and Biological Physics	X_420167	6	400	
Advanced Medical Image Processing	X_422610	6	400	
Year 2				
Master Leraar VHO Scheikunde of Natuurkunde *A detailed description per unit of education can be found in the Study Guide.*				
Didactiek 1	O_MLDIDAC_1	6	400	
Didactiek 2	O_MLDIDAC2	9	400	
Peergroup 1	O_MLPEERGR_1	0	400	
Peergroup 2	O_MLPEERGR_2	0	000	
Praktijk 1	O_MLPRAK_1	6	400	
Praktijk 2	O_MLPRAK_2	9	400	
Praktijk 3	O_MLPRAK_3	15	400	
Startweek Septemberstart	O_MSTARTSEP	0	000	
Pedagogische Didactische Verdieping	O_MPEDIVER	9	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)
Unit of education	**course code**	**EC**	**level**	
Only for Education Specialisation				
Praktijkonderzoek	O_MLPROZ	6	400	
Wereldburgerschap Deel 1	O_MWRLDBS	3	400	
AI in het Onderwijs	O_MAIIHO	3	400	

Vernieuwende onderwijsconcepten	O_MVERNOND	3	400	
Tweetalig Onderwijs	O_MTTO	3	500	
Wereldburgerschap Deel 2	O_MWRLDBS_2	3	400	
Inclusieve Digitale Didactiek	O_MIDD	3	400	
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

Not applicable.

Article 10.5 Participation in practical training and tutorials

1. In the case of practical exercises, there may be attendance requirements. For details on attendance requirements, please refer to the study guide of the relevant unit of study.	Approval OLC (7.13 d)
2. In the case of tutorials, there may be attendance requirements. For details on attendance requirements, please refer to the study guide of the relevant unit of study.	Approval OLC (7.13 d)
3. For thesis and internship, the programme applies the guidelines as stipulated in the Thesis and Placement Regulations.	Approval OLC (7.13 d)

11. Evaluation and transitional provisions

Article 11.1 Evaluation of the programme

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

Article 11.2 Transitional provisions

1. 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:
   - The Communication variant and the Society Oriented variant are being discontinued from academic year 2025-2026. Students who start their Master's programme in 2025-2026 can no longer be admitted into these specializations. Students who started their Master's programme in 2024-2025 (or before) can still complete the Communication variant and the Society Oriented variant by following the courses listed in the TER 2024-2025 for these specializations:

Advice OLC (7.13 a)

Communication Variant

Unit of education	**course code**	**EC**	**level**
Year 1			
From Physics to Physiology	X_430112	6	400
Biomedical Optics	XM_41014	6	400
Scientific Writing in English for BMTP	X_420563	3	400
Ethics in Life Sciences	AM_470707	3	400
Major research Project BMTP for CSE	XM_0065	30	600

Constrained choice: select 12 EC			
Current Clinical Issues	XM_0064	6	400
Soft Condensed Matter and Biological Physics	X_420167	6	400
Advanced Medical Image Processing	X_422610	6	400
Year 2			
Research Methods for Analyzing Complex Problems	AM_1182	6	400
Science and Communication	AM_470587	6	500
Constrained choice: choose 1			
Research Internship Science Communication	AM_1162	30	600
Reflective Practice Internship Science Communication	AM_1163	30	600
Constrained choice: select 18 EC			
Science in Dialogue	AM_1002	6	500
Communication, Organization and Management	AM_470572	6	500
Science Museology	AM_470590	6	500
Science Journalism	AM_471014	6	500

Society Oriented Variant

Unit of education	course code	EC	level
Year 1			
From Physics to Physiology	X_430112	6	400
Biomedical Optics	XM_41014	6	400
Scientific Writing in English for BMTP	X_420563	3	400
Ethics in Life Sciences	AM_470707	3	400
Major research Project BMTP for CSE	XM_0065	30	600
Constrained choice: select 12 EC			
Current Clinical Issues	XM_0064	6	400
Soft Condensed Matter and Biological Physics	X_420167	6	400
Advanced Medical Image Processing	X_422610	6	400
Year 2			
Research Methods for Analyzing Complex Problems	AM_1182	6	400
Internship Major Science in Society	AM_1185	30	500
Analysis of Governmental Policy	AM_470571	6	500
Communication, Organization and Management	AM_470572	6	500
Constrained Choice: Select at least 12 EC			
Societal Entrepreneurship H&L sciences	AM_470575	6	500
Business Management	AM_470584	6	500

Disability and Development	AM_470588	6	500		
Health, Globalisation and Human Rights	AM_470818	6	400		
Policy, Politics and Participation	AM_470589	6	500		
Science in Dialogue	AM_1002	6	500		
Clinical Development and Clinical Trials	AM_1180	3	500		
Epidemiology	AM_1179	3	500		

Approval of the Programme Committee of the curriculum structure (submitted via UAS), on 06/12/2024.

Advice and/or approval by the Programme Committee (with the exception of the curriculum structure), on 10/07/2025.

Approved by the Faculty Joint Assembly, on 25/07/2025.

Adopted by the board of the Faculty of Science on 11/08/2025.

Appendix I

Overview of articles that must be included in the OER

Based on Article 7.13, paragraph 2 and Article 7.30b, paragraph 2 of the WHW.

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
[keuze:] 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 paragraphs 2 & 5
Article 7.4 Pre-Master's programme	7.57i section 1
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 section – 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
[Keuze:] Article 10.3 Elective units of education	7.13 paragraph 2 sub a
[Keuze:] 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 programme	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)

Article 7.13, paragraph 2, of the Higher Education and Research Act	FGV		OplC	
	I	A	I	A
a. the content of the programme and the 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 units of education			■	
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 in which students can take the examinations and the final examinations for Bachelor's and Master's programmes, as well as the timing of and number of opportunities	■			■
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 Board of Examiners may grant exemptions from taking one or more examinations on the basis of examinations and final examinations for Bachelor's and Master's programmes previously completed in higher education, or on the basis of knowledge or skills acquired 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	■			■
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.				■

The lettering corresponds to the lettering of Article 7.13 section 2 of the WHW

Abbreviations used:

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

Appendix III
Ordinances of VU Executive Board (CvB) and Binding Master's Guidelines

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	Bachelor's and Master's education guidelines included in model TER, revised on 2 July 2019
3.1	Signing up for education and examinations	CvB ordinance 17-11-2020, prior consent of USC.
3.4.1	Determination and publication of the results (1) Grading deadline exams ten working days (2) Theses twenty working days	(1) Bachelor's guideline included in model TER, revised on 2 July 2019 ((2) Quality demand 11 from the VU-wide assessment policy, CvB ordinance 15-05-2012, approval GV 28-02-2013
3.5.1	Two possibilities to take examinations per year	Bachelor's and Master's education guidelines included in model TER, revised on 2 July 2019
3.5.2	Resit: most recent grade is valid, resit allowed in case of pass grade	Taken from the UvA guidelines, as part of the harmonisation, 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, prior consent USR. As a result of harmonisation 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	Bachelor's and Master's education guidelines included in model TER, revised on 2 July 2019
7.3	Selection criteria	Bachelor's and Master's education guidelines included in model TER, revised on 2 July 2019
Section B2, article:	**Concerns:**	**CvB ordinance / guideline**
10.1.1	Composition programme	Bachelor's and Master's education guidelines included in model TER, revised on 2 July 2019
10.1.3	Categorisation of units	Bachelor's and Master's education guidelines included in model TER, revised on 2 July 2019

Appendix IV
Higher Education and Research (Implementation) Act

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 organisation and the administration of the affairs of the institution,
g. membership on the board of a student organisation of a certain size with full legal capacity, or a similar organisation 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 organisation per academic year, as well as the eligible administrative offices.