


MASTER's Degree Programme VUmc school of medical sciences

Cardiovascular Research CROHO 66586

A. faculty section

Academic year 2017-2018

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Section A: faculty section

1. General provisions

Article 1.1 Applicability of the Regulations

1. These Regulations apply to the teaching and examinations for the Master's degree programmes: Cardiovascular Research CROHO 66586 and Oncology CROHO 60811 (hereinafter referred to as: the degree programme) provided by the Faculty of VUmc School of medical sciences (hereinafter referred to as: the faculty).
2. These Regulations consist of a faculty section (A) and a programme-specific section (B). Section A contains general provisions and applies to the teaching and examinations of the Master's degree programmes of the faculty. Section B contains programme-specific provisions. Together, Sections A and B form the Teaching and Examination Regulations for the programme.
3. The Regulations can be declared to apply *mutatis mutandis* to the joint degree programmes and units of study, pursuant to Section 7.3c of the WHW, also provided by the faculty.
4. These Regulations apply to anyone enrolled in the programme, irrespective of the academic year in which the student was first enrolled in the programme.
5. Section B of these Teaching and Examination Regulations may contain additional general provisions for the relevant degree programme.

Article 1.2 Definitions

The following definitions are used in these Regulations:

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|---------------------------|---|
| a. EC (European Credit) | an credit with a workload of 28 hours of study; |
| b examination: | the final examination of the Master's programme; |
| c. fraud and plagiarism: | the student's acts or failures to act which make it wholly or partially impossible to accurately judge his/her knowledge, understanding and skills; |
| d. 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 degree programme (a degree programme, a major or a specific curriculum within a degree programme) for which the collaborating institutions are jointly responsible; |
| e. master year | programmed year of the degree expressed in first master year, second master year and third master year. |
| f. (programme) component: | a unit of study of the programme within the meaning of the WHW article 7,3; |
| g. period: | a part of a semester; |
| h. practical exercise: | the participation in a practical training or other educational learning activity, aimed at acquiring certain (academic) skills. Examples of practical exercises are: <ul style="list-style-type: none">o researching and writing a thesiso carrying out a research assignmento taking part in fieldwork or an excursiono 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 course components, teaching activities/methods, contact hours, testing and examination methods and recommended literature; |
| j. thesis: | a component comprising literature research and/or a contribution to scientific research, always resulting in a written report; |
| k. VU-net | the Student Information System for the master programmes medicin, cardiovascular research and oncology; |
| l. CurSys. | The student information system for the students of the postgraduate master programme epidemiology |
| m. course catalogue: | the guide for the degree programme that provides further details of the provisions and other information specific to that programme. The course catalogue is available electronically at www.vumc.nl ; |
| n. workload: | the workload of the unit of study to which an interim examination applies, expressed in terms of credits = EC. (The workload for 1 year (1,680 hours) is 60 EC credits); |

- o. academic year: the period beginning on 1 September and ending on 31 August of the following calendar year;
- semester: the first (september-january) or second part (february-august) part of the academic year.
- p. examination: an assessment of the student's knowledge, understanding and skills relating to a course component. 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 interim examination;
- q. Admissions Board: the committee that assesses, on behalf of the dean, whether a candidate meets the requirements for admission to the Master's degree programme of his/her choice. If there is no Admissions Board appointed for the degree programme, the Examinations Board (within the meaning of Section 7.12 of the WHW) functions as Admissions Board;
- r. University: the University of Amsterdam
- s. VU-net: the (closed) digital platform voor VU students and employees.
- s. WHW: the Dutch Higher Education and Research Act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*, WHW);
- t. programme charter: the part of the Student Charter specific to the programme in accordance with Section 7.59 of the WHW.

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

2. Previous education and admission

Article 2.1 Previous education

1. In order to qualify for enrolment in a Master's degree programme, a Bachelor's degree obtained in academic higher education (WO) is required. The requirements that the Bachelor's degree must meet are specified in Section B.
2. In the event that a candidate does not have a Bachelor's degree as referred to in paragraph 1, the Admissions Board of the degree programme will assess suitability for admission to the programme on the basis of the requirements stipulated in Section B.
- 2a for the postgraduate master programme epidemiology article 2.1.1 and 2.1.2 do not apply. Education requirements are mentioned in part B of the EAR.

Article 2.2 Registration and enrolment

1. The deadline for registering for the Master's programme is stipulated in Article 3.4 (Section B).
2. After registering on time, the student must enrol before 1 September.
- 2a For the master programme in medicine in addition to article 2.2.2 students that register for the first year of the master programme need to register before the first of the month in which the student starts with his/her programme. In subsequent years the students need to comply to article 2.2.2.

Article 2.3 Faculty Admissions Board

The dean will establish one or more Admissions Boards. The dean will appoint its members after consultation with the programme directors and examinations boards of the relevant degree programmes.

Article 2.4 Admissions procedure

1. The Admissions Board is responsible for admission to the programme.
2. With a view to admission to the programme, the Admissions Board assesses the candidate's knowledge, understanding and skills. The Board may request experts within or outside the University to test certain types of knowledge, understanding and skills, in order to supplement written evidence of the programme/programmes the student has already completed. In its assessment, the Board includes knowledge of the language in which the programme will be taught.
3. Candidates receive either confirmation of admission or a negative decision. An appeal against a negative decision can be lodged with the Examination Appeals Board within six weeks.

Article 2.5 Refusal or termination of enrolment (*unsuitability/judicium abeundi*)

1. Based on the provisions of Section 7.42a of the WHW, the dean or the Examinations Board may, in exceptional cases, ask the Executive Board to terminate or refuse a student's enrolment in a programme, if that student's actions or remarks show that he/she is unsuitable either for practising one or more of the professions for which the programme in question is preparing the student or for the practical preparation for professional practice.
2. If a student is suspected of being unsuitable as described in paragraph 1, the Examinations Board or the dean will institute an inquiry, of which the student will be informed immediately. The Examinations Board or the dean will not issue any recommendation without carefully considering the interests involved and giving the student the opportunity to be heard.

3. Degree programme structure

Article 3.1 Structure of academic year

1. Every degree programme will be offered in a year divided into two semesters.
2. Every semester consists of three consecutive periods of eight, eight and four weeks.
3. For the postgraduate programme Epidemiology and the master programme in medicine, article 1 and 2 do not apply, the schedule of the academic year is described in the programme specific section of the EAR.

Article 3.2 Organisation of the programme

1. The programme comprises the units of study included in Section B.
2. The size of the degree programme in EC is stipulated in Section B.
3. A unit of study comprises 6 EC or a multiple thereof.
4. By way of exception to paragraph 3, An educational unit may consist of 3EC or a multiple thereof, The Executive Board need to grand permission.
- 4a for the following programmes/ or parts of programmes article 3.2.3 and 3.2.4 do not apply:
 - o Postgraduate master programme epidemiology
 - o Third master year of the master degree programme in medicine programme edition 2015
 - o The master degree programme in medicine edition 2008
5. The programme is made up of compulsory part and an individual Master's thesis or academic work placement and, if applicable, a subject-specific optional component as specified in more detail in the programme-specific section.
6. If the student wishes to choose a different unit of study than those stipulated in Section B as part of his/her electives, prior permission is required from the Examinations Board.

4. Examinations

Article 4.1 Signing up for educational modules and examinations

1. Every student must sign up for following educational modules, when registration is necessary for participation. Every student needs to register for the exam and resits. Registration is only open during the assigned periods The procedure for signing up is described in the supplement of the student charter.
 - 1a. For the Medical Master different rules apply for the signing up procedure see www.med.vu.nl
 - 1b. For the master epidemiology different rules apply for the signing up procedure see www.epidm.nl
2. By way of exception to the provisions of paragraph 1, any student who has correctly signed up for participation in the instruction/classes for a particular course and has been admitted will also be signed up for the subsequent examination, unless the degree programme stipulates a different approach.

Article 4.2 Type of examination

1. Section B stipulates the way in which a unit of study is concluded and the form any examination will take.
2. At the student's request, the Examinations Board may permit a different form of examination than that stipulated in the course catalogue. If applicable, more detailed regulations on this are included in the Rules and Guidelines for the Examinations Board.
3. In the case of a unit of study that is no longer offered, in the academic year following its termination, at least one opportunity will be provided to sit the examination(s) or parts thereof

and a transitional arrangement will be included in the programme-specific section for the subsequent period.

Article 4.3 Oral examinations

1. Unless otherwise specified for the relevant unit of study in Section B, no more than one student will be examined orally at the same time.
2. An oral examination is public unless the Examinations Board or examiner determines otherwise in an exceptional case. A student may submit a reasoned request to the Examinations Board to depart from the public nature of the oral examination. The Examinations Board will balance the interests of the student against the interests of a public examination.
3. Unless otherwise specified by the Examinations Board, an oral examination will be taken in the presence of a second examiner.
- 3.a For the master programme in medicine additional requirements are in place to article 4.2.1, 4.2.2 and 4.2.3 these are described in part B of the EAR.

Article 4.4 Determining and announcing results

1. The examiner determines the result (= mark) of a written examination as soon as possible, but at the latest within ten working days. Contrary to the provisions of the first sentence, the marking deadline for essays, papers and exams consisting of more than 50% of open questions is no longer than fifteen working days, while for theses and final assignments the marking deadline is no longer than twenty working days. 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.
- 1a for the master programme in medicine an exception is made on article 4.4.1 for the national progression test (VGT) the results will be determined after 25 working days.
2. The examiner determines the result (= mark) of an oral examination as soon as the examination has finished and informs the student accordingly. The third sentence of the first paragraph applies.
3. In the case of alternative forms of oral or written examinations, the Examinations Board determines in advance how and by what deadline the student will be informed of the results.
4. Together with the result of an examination, the student's attention will also be drawn to their right to inspect the assessed work and have a post-examination discussion as stipulated in Articles 4.8 and 4.9, as well as his/her option to appeal to the Examinations Appeals Board (Cobex).
5. A student may lodge an appeal against the way in which the result was reached with the Examination Appeals Board within six weeks of the announcement of the result.

Article 4.5 Resits

1. An opportunity will be offered to resit examinations in the degree programme once in each academic year.
2. The options for retaking work placements, (components of) professional behaviour, or theses are detailed in the relevant work placement manual or thesis regulations.
3. The most recent mark will apply in the event of a resit. Both passing as failing grades can be resat.
4. The resit for an examination must not take place within ten working days of the announcement of the result of the examination being resat.
5. The Students who have successfully finished all interim examinations except one and have no opportunity for a retake before the end of the academic year can ask the examination board for an extra opportunity. The requests needs to be motivated. This examination may have another form than stated in the exam manual. Requests need to be filed no later than the first of July. Excluded from this article are practical examinations including internships, literature studies, theses, and the professional behaviour exam.
6. The internships/theses/exam professional behaviour, that has been passed cannot be retaken.

Article 4.6 Marks

1. Marks are given on a scale from 1 to 10, with a maximum of one decimal after the comma.

2. Marks are given with 0 or 5 after the point.
3. Marks between 5 and 6 will be rounded to whole marks: 0,1 to 0,4 will be rounded down and 0,5 to 0,9 will be levelled up. A programme component is passed at a six or higher.
4. Instead of a mark examinations can also be assessed with failed/passed (F/P) or insufficient/sufficient/good (I/S/G). A programme component is passed with a passed, sufficient or good.

Article 4.7 Exemption

1. At the written request of the student, the Examinations Board may exempt the student from taking one or more examination components, if the student:
 - a) has passed a course component of a university or higher professional education programme that is equivalent in both content and level; or
 - b) has demonstrated through his/her work and/or professional experience that he/she has sufficient knowledge and skills with regard to the relevant course component.
2. The Examinations Board will make a decision within twenty working days of receiving the written request.
3. This exemption does not apply one or more programme components. For more information see part B

Article 4.8 Validity period for results

1. The validity period of examinations passed and examination exemptions specified in Section B.
2. The validity period of a an interim examination is limited to the academic year in which it was sat or until the end of the course concerned, or different as stipulated for the relevant units of study in Section B.
3. The Examinations Board can extend the limited validity period of an examination or exemption if a student submits a reasoned request to that effect. The Examinations Board can decide to permit the extension of the validity only after the individual making the request has successfully completed a supplementary examination on the relevant subject matter.

Article 4.9 Right of inspection

1. For at least twenty working days after the announcement of the results of a written examination, the student can, on request, inspect his/her assessed work, the questions and assignments set, as well as the standards applied for marking.
2. The Examinations Board can determine that the inspection or post-examination discussion referred to in paragraph 1 take place exclusively at a specified place and at a specified time. The place and time referred to in the previous clause will be announced at the time of the examination and on VU-net.
3. If the student was unable to attend at the place and time referred to in paragraph 2 through no fault of his/her own, an alternative option will be offered.
4. If a student intends to appeal against the way in which his/her mark was assessed, he/she can be issued with a copy of the marked work at his/her request.

Article 4.10 Post-examination discussion

1. If a collective post-examination discussion has been organised, individual post-examination discussions will be held only if the student has attended the collective discussion or if he/she was unable to attend the collective discussion through no fault of his/her own.
2. Students who meet the requirements stipulated in the first paragraph can submit a request for an individual post-examination discussion to the relevant examiner. The discussion will take place at a time and location to be determined by the examiner.

Article 4.11 Master's final examination

1. The Examinations Board determines the final examination result and the date on which the student obtains his/her degree after it has been established that the student has passed all the units of study belonging to the programme.
2. A diploma can only be awarded after the Executive Board has declared that the student has satisfied all the procedural requirements, including the payment of tuition fees.

Article 4.12 Diplomas and transcripts

1. The Examinations Board grants a diploma as proof that the student has passed his/her final examination. The Executive Board sets the model for the diploma. The Examinations Board adds a diploma supplement to the diploma providing information on the nature and content of the degree programme completed. The diploma supplement is drawn up in Dutch or English and complies with the European format.
2. Individuals who have successfully completed more than one or more components of the programme and who cannot be awarded a diploma as stipulated in paragraph 1 will, on request, receive a statement to be issued by the relevant Examinations Board stating at least the components that have been successfully completed together with the units of study they involved, the number of EC obtained and the way in which the examinations were taken.
3. The student can, without needing to provide reasons, request that the Examinations Board not proceed to award a diploma, unless the student him-/herself submitted the request for its issue.

Article 4.13 Fraud and plagiarism

1. The provisions of the (VU) Rules and Guidelines for the Examinations Board] apply in full.
2. Electronic detection software programs may be used to detect plagiarism in texts. In submitting a text, the student implicitly consents to the text being entered into the database of the detection program concerned.

5. Study supervision and study progress

Article 5.1 Administration of study progress and academic student counselling

1. The dean is responsible for the correct registration of the students' study results in SAP/SLcM. After the assessment of an examination component has been registered, every student has the right to inspect the result for that component via VUnet.
- 1a For the Postgraduate master degree Epidemiology the registration takes place in Cursys
2. Enrolled students are eligible for counselling, as described in the faculty counselling document

Article 5.2 Adaptations for students with a disability

1. A student with a disability can fill out a (digital) request form for adaptations at the student advisors. Students with a disability may qualify for special adaptations to the teaching provided, examinations and practicals. These adaptations will be tailored as far as possible to the individual disability of the student, but are not permitted to affect the quality or level of difficulty of a subject or examination. In all cases the student must meet the exit qualifications of the programme.
2. The request referred to in paragraph 1 must be accompanied statement from a doctor or psychologist providing, where needed, an estimation of the possible limitation in study progression.
3. In the case of dyslexia, no recommendation from a student counsellor is required and a statement from a BIG, NIP or NVO accredited testing centre will suffice. Where possible, the statement referred to in this paragraph should include an estimation of the extent to which study progress will be hindered.
4. With regard to requests for adaptations to the educational programme and logistical arrangements, decisions will be made by the Faculty Board or the Director of Education acting on the Board's behalf. The Examination Board will decide on any requests for adaptations relating to the process of examination.
5. If a positive decision is made in response to a request as referred to in paragraph 1, the student will make an appointment with the study advisor to discuss how the necessary adaptations can be facilitated.
6. A request for adaptation may be declined if granting it would constitute a disproportionately large drain on the organizational resources of the faculty or university.
7. All approved facilities connected to the disability will be registered in SAP/SLM or Cursys on the appropriate section. The student receives notification by email of this registration. For central facilities (such as resting rooms) the student advisor assigns the Faculty Campus Organisation to realize the necessary facilities for the student. FCO is responsible for the execution and communication concerning these facilities.
8. For permanent disabilities the special facilities are granted for the complete duration of the study. For disabilities of a temporary nature the time period will be determined by the student advisor, registered in SAP/SLM and if needed communicated to FCO,

6. Hardship clause

Article 6.1 Hardship clause

In instances not regulated by the Teaching and Examination Regulations or in the event of demonstrable extreme unreasonableness and unfairness, the dean responsible for the degree programme will decide, unless the matter concerned is the responsibility of the Examinations Board.

B. programme-specific section

Academic year 2017-2018

Disclaimer. This translation is provided for information purposes only. In the event of a difference of interpretation, the original Dutch version of this document is binding.

Section B: Programme-specific section Cardiovascular Research

1. General provisions

Article 1.1 Definitions

For definitions see Part A article 1.2

Article 1.2 Degree programme information

1. The programme Cardiovascular research CROHO number 66586 is offered on a full-time, basis and the language of instruction is English.
2. The programme has a workload of 120 EC.
3. A unit of study comprises 6 EC or a multiple thereof.

Article 1.3 Intake dates

The programme is offered starting in the first semester of the academic year only (1 September)

2. Programme objectives and exit qualifications

Article 2.1 Programme objective

The programme aims:

- a) To prepare the student to practice as an independent professional within the field of Cardiovascular Research.
- b) To teach the student specialized knowledge, skills and understanding in the field of Cardiovascular Research and to be a suitable candidate for a subsequent course of study leading to a career in research.
- c) To prepare the student for academic work in the field of Cardiovascular Research.

The programme's objectives are as follows:

- a) awareness of the ethical aspects of medical research;
- b) independent academic thought processes and performance;
- c) communicating at an academic level in the student's own language and English;
- d) applying specialist academic knowledge in a wider and/or philosophical and social context.

The degree programme focuses on the student's personal development, promotes his or her awareness of social responsibility in research and develops students' skills of expression in the English language.

Article 2.2 Exit qualifications

In all events, a graduate of the degree programme will have the following attainment level:

- 1) Has knowledge of the principal cardiovascular concepts, techniques, theories and research questions.
- 2) Is familiar with the general scientific as well as general clinical and cardiovascular journals and other sources of scientific information.
- 3) Has insight in the position of cardiovascular research within medicine, biomedical and natural sciences and has insight in the (sub)disciplines, relevant to cardiovascular research.
- 4) Has insight in the scientific and social relevance of cardiovascular diseases.
- 5) Is familiar with the rules of Good Laboratory Practice.
- 6) Is proficient in the use of computer software relevant to cardiovascular research.
- 7) Can combine knowledge from multiple disciplines and apply it to translational medicine.
- 8) Can define a research plan in which study design, materials and methods, and analysis of the results are described.
- 9) Can design and conduct biomedical cardiovascular experiments in particular.
- 10) Can apply medical and scientific knowledge to questions of societal relevance.
- 11) Can select, interpret and summarise information. Can distinguish between the principal and minor issues and define their relationships.
- 12) Can evaluate his/her own scientific research independently and critically with respect to design, methods used and results obtained.
- 13) Can integrate societal and ethical aspects of research, or the application thereof, in decision making.

- 14) Can collaborate and communicate with researchers from the same and other disciplines.
- 15) Can present research in English, both orally and in writing.
- 16) Can contribute conceptually to planning, discussion of scientific data and scientific debate.
- 17) Can acquire general medical information, as well as cardiovascular information, and is able to critically analyse and evaluate this information.
- 18) Can reflect on knowledge and skills acquired.
- 19) Can formulate personal study aims, independently and in collaboration with others.
- 20) Can independently acquire novel knowledge and skills, is aware of the benefits of life-long education and is able to put this in practice.

Article 2.3 Indecent behaviour during the programme

1. Students Cardiovascular Research should, in the context of their programme, behave like a good student Cardiovascular Research befits. This applies to the programme as a whole and in particular in cases where a student, in the context of his/her programme, or as student Cardiovascular Research has contact with people who are present and/or employed at the VU, VUmc or the healthcare institution wherein he/she attends part of the programme. Indecent behaviour in this context includes: discriminating, insulting, offensive or otherwise negative remarks, impolite expressions, violence, no or too little respect, decency or hygiene, violation of confidentiality, acting deceitfully, forgery of documents, fraud ^[2], deliberate deception among other things, as well as unacceptable behaviour including sexual intimidation, and acting towards a third person against his/her wish. Additionally, one is referred to the "Student statute 2017-2018" of the VU.
2. In case, at any time during the programme, a teacher, fellow-student or someone not-directly involved in the programme states an action of indecent behaviour by a student, the teacher, fellow-student or person not-directly involved in the programme, after having informed the student in question, reports in writing and justified to the dean. A "notification of an incident of order" will be made. Subsequently, the notification will be handled in accordance with the *Procedure notification of an incident of order* (on Blackboard). Additionally, one is referred to the "Student statute 2017-2018" of the VU.

3. Further admission requirements

Article 3.1 Admission requirements

1. Admission to the Master's programme is possible for an individual who can demonstrate that he/she has the following knowledge, understanding and skills at the Bachelor's degree level, obtained at an institution of academic higher education: (the selection procedure can be found on www.med.vu.nl):
 - a) The applicant has knowledge in anatomy, physiology, biochemistry and immunology of heart and circulation at the level of Bachelor of Science degree.
 - b) The applicant has an understanding of the cardiovascular system at the level of the entrance examination
 - c) The applicant has tangible laboratory experience, preferably in the form of an internship in a biomedical laboratory
 - d) Average grades during the Bachelor should be 7.5 or higher in the Dutch grading system, or a foreign equivalent.
 - e) Bachelor thesis or internship should at least be graded with an 8.0.
2. The Admission Board will investigate whether the interested person meets the admission requirements.
3. In addition to the requirements referred to in the first paragraph, the Board will also assess requests for admission in terms of the following criteria:
 - a) Candidates completed their degree at a University College, did a double degree or an honours programme, or have other proof of having completed a bachelor's programme geared toward excellence.
 - b) Students with a bachelor degree from an institution of higher education (HBO) must have completed a programme geared toward excellence and may be admitted to the programme on the basis of a decision to that effect taken by the admission board of the Master's programme. The admission board may make additional demands of the student before granting admission to the Master's programme.

4. At the start of the programme the candidate must have fully completed the bachelor's programme allowing admission to this Master's programme.

Article 3.2 Pre-Master's programme

1. The master programme Cardiovascular research has no pre-Master's programme

Article 3.3 Limited programme capacity

1. The dean will, if necessary, announce the maximum programme capacity by the 1st of May prior to the start of the academic year.
2. Candidates will be selected in the following way:
 - a) Marks obtained in the bachelor programme.
 - b) Marks obtained in the admission exam.

Article 3.4 Final deadline for registration

A candidate must submit a request to be admitted to the programme through Studielink before the 1st of June, but before the 1st of April in the case of foreign students who want to use facilities like housing.

Article 3.5 English language requirement for English-language Master's programmes

1. The proficiency requirement in English as the language of instruction can be met by the successful completion of one of the following examinations or an equivalent:
 - IELTS: 6.5
 - TOEFL paper based test: 580
 - TOEFL internet based test: 92-93
2. Exemption is granted from the examination in English referred to in the first paragraph to students who, within two years of the start of the programme:
 - met the requirements of the VU test in English language proficiency TOEFL ITP, with at least the scores specified in paragraph 1, or
 - had previous education in secondary or tertiary education in an English-speaking country as listed on the VU website, or
 - have an English-language 'international baccalaureate' diploma

Article 3.6 Free curriculum

1. Subject to certain conditions, the student has the option of compiling a curriculum of his/her own choice which deviates from the curricula prescribed by the programme.
2. The concrete details of such a curriculum must be approved beforehand by the most appropriate Examinations Board.
3. The free curriculum is put together by the student from the units of study offered by higher education institutes (HEIs) and must at least have the size, breadth and depth of a regular Master's programme.

4. Curriculum structure

Article 4.1 Composition of programme

1. The programme consists of the following components:
 - a. Compulsory units of study
 - b. optional educational units of study
 - c. Major/minor internship
 - d. Literature study

Article 4.2 Compulsory units of study

The compulsory units of study are:

Year 1

Name of course component	Course code	Number of Credits	Period or semester	Teaching method	Type of test	Level
Heart and circulation: basic principles	M_CHCBP16	6	Period 1	Lectures, workgroups, self-study	Written examination, assignments	400
Cardiac disease:	M_CCDMDT16	6	Period 1	Lectures, workgroups,	Written examination,	400

Mechanisms, diagnosis and treatment				self-study	assignments	
Diabetes and vascular disease: Mechanisms, diagnosis and treatment	M_CDVDMDT16	6	Period 2	Lectures, workgroups, self-study	Written examination, assignments	400
From advanced imaging to stem cells	M_CFAISC16	6	Period 2	Lectures, workgroups, self-study	Written examination,	400
Scientific Writing and presenting in English	M_FWSE09	3	Period 3	Lectures, workgroups, self-study	Written examination, assignments	500
Biostatistics	M_FBIOSTAT16	3	Period 3	Lectures, workgroups, self-study	Written examination, assignments	500
Academic core Y1	M_CACCOREA14	0	Semester 1 and 2	Lectures, workgroups, self-study	Lectures, workgroups, self-study	500
Minor internship	M_CMINORI15	30	Semester 2	Practical work, work discussion	Report, presentation, practical work	400

year 2

Name of course component	Course code	Number of credits	Period or semester	Teaching method	Type of test	Level
Academic core Y2	M_CACCOREB14	3	Semester 1	Lectures, workgroups, self-study and e-learning modules	assignments	500
Literature Study	M_CLITSTU09	9	Semester 1-2	Work discussions	Report, presentation	500
Major internship	M_CMAJORI15	36	Semester 1-2	Work discussion Practical work	Thesis Presentation Practical work	500

Article 4.3 Practical exercise

Practical exercise is described in Article 4.2 section B of this AER

Article 4.4 Electives

The student can take the following electives:

Name of course component	Course code	Number of Credits	Period or semester	Teaching method	Type of test	Level
Biobusiness course	M_OBIOBUS10	3	4-6	Lectures workgroups self-study	Assignments, exam	500
Proteomics in biomedical Sciences	M_CPROTBIO09	3	4-6	Lectures workgroups self-study	Exam	500
Life cell imaging	M_CLIFEC09	3	4-6	Lectures workgroups	Assignments exam	500

				self-study		
Research ethics	M_ETHICA09	3	4-6	Lectures workgroups self-study	Assignments exam	500
Advanced Cardiac Diagnostics	M_CCCARDDIA09	3	4-6	Lectures workgroups self-study	Assignments exam	500
Academic teaching and presenting	M_CACTP09	3	4-6	Lectures workgroups self-study	Assignments exam	500

Advance permission must be obtained via the website of the school of medical sciences from the examiner for optional courses. The student can apply for other courses not listed above, for which they need to provide the programme of the course, the level, the examination and their own study plan including results thus far. The total amount of EC for the elective courses is 12 EC.

Article 4.5 Sequence of examinations

Students may participate in examinations for the units below only if they have passed the examination or examinations for the units mentioned:

- a. Minor internship after passing 18 EC of compulsory courses
- b. Major internship after passing minor internship
- c. Literature study after passing minor internship

Article 4.6 Participation in practical exercise and tutorials

1. In the case of a practical training, the student must attend at least 100 % of the practical sessions. Should the student attend less than 100 %, he/she must repeat the practical training, or the Examinations Board may have one or more supplementary assignments issued.
2. In the case of tutorials with assignments, the student must attend at least 100 % of the tutorials. Should the student attend less than 100 %, he/she must repeat the study group, or the Examinations Board may have one or more supplementary assignments issued.
3. In exceptional circumstances, the Examinations Board may, at the request of the student, permit an exemption from this requirement if, in the opinion of the Board, the assessment of the intended skills is also possible with a lesser percentage of participation, with or without the imposition of supplementary requirements.

Article 4.7 Maximum exemption

A maximum of 30 EC of the curriculum can be accumulated through granted exemptions by the examination board. This exemption does not apply to the Major Internship (Master's Thesis).

Article 4.8 Validity period for results

The validity period of examinations and exemptions from examinations is limited, as follows:

1. The period of validity of interim examinations is 3 years, as of the subsequent academic year in which the interim examination has been taken.
2. The period of validity for exemptions is 3 years, as from the year the interim examination is granted
3. The examination board can extend the validity of an examination or exemption when the student files a motivated request. the examination board may decide that he or she is required to sit an additional or replacement interim examination in that component before being permitted to sit the final examination .

Article 4.9 Degree

Students who have successfully completed their Master's final examination are awarded a Master of Science degree. The degree awarded is stated on the diploma. If it is a joint degree, this will also be stated on the diploma.

5. Transitional and final provisions

Article 5.1 Amendments and periodic review

1. Any amendment to the Teaching and Examination Regulations will be adopted by the dean after taking advice from the relevant Board of Studies. A copy of the advice will be sent to the authorised representative advisory body.
2. An amendment to the Teaching and Examination Regulations requires the approval of the authorised representative advisory body if it concerns components not related to the subjects of Section 7.13, paragraph 2 sub a to g and v, as well as paragraph 4 of the WHW and the requirements for admission to the Master's programme.
3. An amendment to the Teaching and Examination Regulations can only pertain to an academic year that is already in progress if this does not demonstrably damage the interests of students.

Article 5.2 Transitional provisions

Notwithstanding the current Teaching and Examination Regulations, the following transitional provisions apply for students who started the programme under a previous set of Teaching and Examination Regulations:

- a) For students registered before the academic year 2015-2016, the course codes M_MINOR09 and M_CMAJOR09 still apply, The students can vary the number of European credits assigned to the modules. For the minor internship the number of EC is between 21-27 and for the major between 36-42 EC. In total 63 EC for both components need to be obtained.
- b) For students registered before the academic year 2015-2016, the course code M_CEXTENS09 still apply, the students can extend their minor or major internship with 3 or 6 EC.
- c) For students registered before the academic year 2016-2017 the compulsory courses M_CPATHO09, M_CCLINBIO09, M_CVASCFU09, M_CREMODE09, M_CBIOSTA09, M_FWSE09 still apply.

Article 5.3 Publication

1. The dean will ensure the appropriate publication of these Regulations and any amendments to them.
2. The Teaching and Examination Regulations will be posted on VU-net and deemed to be included in the course catalogue.

Article 5.4 Effective date

These Regulations enter into force with effect from 1 September 2017

Advice from Board of Studies on 28 November 2016

Approved by authorised representative advisory body (Facultair Overleg) on 8 May 2017

Adopted on behalf of the dean by Mrs. M.C. van der Meijde, MBA, director IOO, vice-dean education on 26 June 2017

