

Teaching and Examination Regulations (OER)

Master program Cardiovascular Research

Amsterdam UMC - location VU University Medical Center


Faculty of Medicine VU Amsterdam

Academic Year 2022-2023

A. Faculty section

B1. program specific section - general provisions

B2. program specific section - content of program

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Part A: Faculty section

1. General provisions

Article 1.1 Applicability of the regulations

1. These regulations apply to anyone enrolled in the program, irrespective of the academic year in which the student was first enrolled in the program.
2. These Regulations enter into force on 1 September 2022.
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.

Article 1.2 Definitions

The following definitions are used in these Regulations:

- | | |
|---------------------------|---|
| a. admission board | the committee that assesses on behalf of the dean whether a candidate meets the requirements to be admitted to the master's program of his/her choice; |
| b. academic year: | the period beginning on the 1 st of September and ending on the 31 st of August of the following calendar year; |
| c. EC (European Credit): | an EC credit with a workload of 28 hours of study; |
| d. educational component: | a unit of study of the program within the meaning of the WHW; |
| e. examination: | the final examination of the Master's program; |
| f. interim 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 grade or symbol (see art. 3.6.4). An interim examination may consist of one or more partial examinations. A resit always covers the same material as the original interim 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 program (a degree program, a major or a specific curriculum within a degree program) for which the collaborating institutions jointly are responsible; |
| h. OLC: | program committee; |
| i. period: | a part of a semester; |
| j. 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">○ 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; |
| k. pre-Master's enrollee: | person enrolled in a pre-Master's program, who is not a student from a legal perspective; |
| l. program: | the totality and cohesion of the course components, teaching activities/methods, contact hours, testing and examination methods and recommended literature; |
| m. SAP/SLM: | the student information system (<i>Student Lifecycle Management</i>); |
| n. semester: | the first (September - January) or second half (February - August) of an academic year; |
| o. specialization | optional route of study within a degree program indicating a deepening |

- of the (inter/multi) disciplinary context of the program;
- p. 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).
- q. study guide: the guide for the study program that provides further details of the courses, provisions and other information specific to that program. The Study Guide is available electronically at: <https://studiegids.vu.nl/en>;
- r. study monitor: dashboard for students and academic advisors with data of the student and that provides insight into the student's study progress;
- s. subject see 'educational component';
- t. track a study pathway within a broader Bachelor's or Master's degree program, such as a fully English-language study pathway within a Dutch-language Bachelor's or Master's degree;
- u. thesis: a component comprising research into the literature and/or contributing to scientific research, always resulting in a written report;
- v. unit of education: a unit of study of the program within the meaning of the WHW; Vrije Universiteit Amsterdam
- 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 study to which an interim 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 credits.

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

2. Study program structure

Article 2.1 Structure of academic year and educational components

1. The study program will be offered in a year divided into two semesters.
2. Every semester consists of three consecutive periods of eight, eight and four weeks
 - a. For the postgraduate program Epidemiology, the Master program Medicine and Higher Healthcare Education (HGZO), Article 1 and 2 do not apply. The schedule of the academic year is described in Section B.
3. An educational component comprises 6 EC or a multiple thereof.
4. By way of exception to paragraph 3, Section B may stipulate that a unit of study comprises 3 EC or a multiple thereof. The Faculty Board requests permission of the Executive Board.
 - a. For the following (parts of) programs Article 3.2.3 and 3.2.4 do not apply:
 - postgraduate Master program Epidemiology,
 - postgraduate master HGZO,

3. Assessment and Examination

Article 3.1 Signing up for education and interim examinations

1. Every student must sign up to participate in the educational components of the program, the examinations and retakes. The procedure for signing up is described in an annex to the Student Charter.

- a. For the Master Medicine different rules apply for the signing up procedure (see Canvas).
 - b. For the Master Epidemiology different rules apply for the signing up procedure (see www.epidm.nl).
 - c. For the Master HGZO different rules apply for the signing up procedure
2. Signing up may only take place in the designated periods.

Article 3.2 Type of examination

1. At the examiner's request, the Examinations Board may allow a different form of interim examination than that stipulated in the study guide. If applicable, more detailed regulations on this are included in the Rules and Guidelines for the Examinations Board.

Article 3.3 Oral interim examinations

1. An oral assessment is public unless the Examinations Board determines otherwise.

Article 3.4 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 either essays, papers or exams consisting of more than 50% of open-ended questions is no longer than fifteen working days, while for theses and final assignments the marking deadline is no longer than twenty working days after submission of the thesis/assignment. The examiner will then immediately ensure that the marks are registered and also ensures that the student is immediately notified of the mark, taking into account of the applicable confidentiality standards.
 - a. For the Master program Medicine an exception is made for Article 4.4.1 for the National Progression Test (Interuniversitaire Voortgangstoets, iVGT) the results will be determined after 25 working days.
2. The examiner determines the result (i.e. mark) of an oral examination as soon as possible [but at the latest within one or two working days] after the examination has finished and informs the student accordingly. The third clause of the first paragraph applies.
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.

Article 3.5 Examination opportunities

1. Per academic year, two opportunities to take examinations per educational component will be offered.
 - a. By way of exceptions to 1., the options for retaking practical components, work placements and theses are detailed in the relevant work placement manual, teaching regulations or graduation regulations.
2. The most recent mark will apply in the event of a resit. A retake is allowed for both passed and failed units of study.
3. The resit for a (partial) interim examination must not take place within ten working days of the announcement of the result of the (partial) examination being resat.
4. The Examination Board may allow a student an extra opportunity to sit an examination if that student
 - a. is lacking only those credits to qualify for his or her degree;
 - 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 assignments and the Master's thesis. Requests for an additional examination opportunity must be submitted to the Examination Board no later than 1 August. If necessary, the method of examination may deviate from the provisions in the study guide.

5. Retaking practical components, work placements and theses is not allowed in case a grade > 5.5 was obtained.
6. If an educational component is no longer offered in the academic year following its termination, at least one opportunity will be provided to sit the interim examination(s) or parts thereof and a transitional arrangement will be included in the program-specific section for the subsequent period.

Article 3.6 Marks

1. Partial marks are given on a scale from 1 to 10 more than one figure after the decimal point.
2. A final mark between 5 and 6 will be rounded to the nearest whole number: up to 5.50, rounded down; 5.50 and higher than 5.50, rounded up. All other final marks will be expressed in whole or half marks.
3. To pass a given course or unit, a final mark of 6 or higher is required.
4. The Examination Board can allow to use symbols rather than numbers, for example, examinations can also be assessed with failed/passed (F/P) or insufficient/sufficient/good (I/S/G). A program component is passed with a pass, sufficient or good.

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 the student:
 - a. has passed a course component of a university or higher professional education program that is equivalent in terms of content and level;
 - 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. One or more educational components with examinations are excluded from this option of exemption, see part B.

Article 3.8 Validity period for results

1. The validity period of interim examinations passed and exemption from interim examinations is unlimited, unless otherwise specified in Section B.
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.

Article 3.9 Right of inspection and post-examination discussion

1. Within twenty working days after the announcement of the results of a written interim examination, but at least ten working days before the resit opportunity for that interim examination, the student can submit a request to inspect their assessed work, the questions and assignments, as well as the standards applied for marking. The place and time referred to in the previous clause will be announced at the time of the interim examination or on Canvas.
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 his or her own.
3. Students who meet the requirements stipulated in paragraph 1 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.

4. Academic student counseling and study progress

Article 4.1 Administration of study progress and academic student counseling

1. The Dean is responsible for the correct registration of the students' study results. After the assessment of an educational component has been registered, every student has the right to

inspect the result of that component and also has a list of the results achieved at his/her disposal in VU.nl.

- a. For the postgraduate Master degree Epidemiology the registration takes place in CurSys.
2. Enrolled students are eligible for academic student counseling. Academic student counselling is in any case provided by:
 - a. The Student General Counselling Service
 - b. Student psychologists
 - c. Faculty academic advisors

Article 4.2 Adaptations for students with a disability

1. A student with a disability can, at the moment of submission to VU.nl, or at a later instance, submit a request to qualify for special adaptations with regard to teaching, practical training and interim examinations. These adaptations 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 study or an examination. In all cases, the student must fulfil the exit qualifications for the study program.
2. The request referred to in the first paragraph must be accompanied by a statement by 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.
3. Students who have been diagnosed with dyslexia must provide a statement by a BIG, NIP or NVO registered professional.
4. The program director or the responsible person on behalf of the faculty board, decides on the adaptations concerning the teaching facilities and logistics. The Examination Board will decide on requests for facilities with regard to examinations.
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 study adviser to discuss the details of the provisions.
6. A request for adaptations can be refused if it would place a disproportionate burden on the organization or the resources of the faculty or university where it upheld. Any such refusal will be substantiated.
7. If the disability justifies an extension of the interim examination time, the responsible person on behalf of the Examinations 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 him/her.
8. The decision as referred to in paragraph 5 may specify a limited validity of the facilities granted.

5. Hardship clause

In instances not regulated by the Teaching and Examination Regulations or in the event of disproportionate unreasonableness and unfairness, the Dean responsible for the degree program will decide, unless the matter concerned is the responsibility of the Examination Board.

Part B1: Program specific section - General Provisions

6. General program information and characteristics

Article 6.1 Study program information

1. The program Cardiovascular Research (CROHO 66586) is offered on a full-time basis.
2. The full-time program has a nominal study duration of 2 years.

Article 6.2 Teaching formats used and modes of assessment

1. The program uses the teaching formats as described in the study guide.
2. The modes of assessment used per educational component are specified in the study guide and in part B2 of this OER.

Article 6.3 Academic student counseling

1. The program offers the following counselling in addition to the student counseling mentioned in Section A
 - a. Program coordinator
 - b. Mentor system which is part of the Academic Core.

Article 6.4 Indecent behavior during the program

1. Master Cardiovascular Research students should, in the context of their program, behave like a good Master Cardiovascular Research student benefits. This applies to the program as a whole and in particular in cases where a student, in the context of his/her program, or as student Cardiovascular Research has contact with people, who are present and/or employed at the VU, Amsterdam UMC or the healthcare institution wherein he/she attends part of the program. Indecent behavior 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, deliberate deception among other things, as well as unacceptable behavior including sexual intimidation, and acting towards a third person against his/her wish. Additionally, one is referred to the Student Charter 2022-2023 of the VU.
2. In case, at any time during the program, a teacher, fellow-student or someone not directly involved in the program states an action of indecent behavior by a student, the teacher, fellow-student or person not-directly involved in the program, 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 CANVAS). Additionally, one is referred to the Student Charter 2022-2023 of the VU.

7. Further admission and requirements

Article 7.1 Intake date

1. The program starts on September 1.

Article 7.2 Admission requirements

1. The admission requirements will be published on the websites of the master program from the 1st of October onwards before the start of the next academic year. Admission to the Master's program is possible for an applicant who has obtained a (bio)medical or related Bachelor's degree obtained at an institution of academic higher education, which meets the following requirements:
 - a. Well-developed academic skills including writing and presenting skills, the ability to evaluate and apply knowledge, and the ability to engage in critical thinking.
 - b. A clear motivation and talent for participation in the program.

- c. Basic knowledge of Molecular Biology, Immunology, Human Anatomy, Physiology and Pathology.
 - d. Preferably a minimum grade-point average of 7.5 (or international equivalent, e.g. a B+, or a GPA of 3.4); and a minimum grade of 8 (or international equivalent, e.g. an A, or a GPA of 4.0), for the Bachelor's thesis. If students have lower grades, they are also invited to apply for the program.
 - e. Pass the admission assessment test of the program. .
2. An international applicant should show that he or she has sufficient level of proficiency in English by meeting at least one of the following standards, no more than two (2) years before the start of the program at the VU:
 - a. (academic) IELTS (>6.5)
 - b. TOEFL paper-based test and TOEFL-ITP (> 580)
 - c. TOEFL internet-based test (> 92)
 - d. Cambridge Certificate of Proficiency in English (CPE) or the Cambridge Certificate of Advanced English (CEA) Score C
3. Applicants who:
 - a. completed an English-taught secondary or higher education degree in Canada, the United States, the United Kingdom, Ireland, New Zealand or Australia or
 - b. have earned a Bachelor's or Master's degree in an English-taught program accredited by NVAO in the Netherlands, or
 - c. have earned a Bachelor's or Master's degree in an accredited English-taught program in another member state of the European Unionare exempted from the requirements referred to in paragraph 2.
4. Dutch degree holders must have passed the English courses in their previous education. In case the admission board decides that the level of English proficiency is not sufficient based on the previous education and/or admission assessment test, students will be asked to provide a VU-test English-language proficiency: TOEFL-ITP certificate (> 580).

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:
 - a. talent and motivation for the program, demonstrated by a letter in which is stated the motivation for the program as well as reference letters from teachers and/or supervisors;
 - b. proficiency in methods and techniques, demonstrated through a minimum grade of 8 for the bachelor thesis or similar;
 - c. level of relevant knowledge and understanding, demonstrated through a pass for the admission assessment test;
 - d. academic attitude and critical thinking, demonstrated through a pass for the admission assessment test;

Article 7.4 Pre-Master's program

1. The master program Cardiovascular Research has no pre-Master's program.

8. Interim examinations and results

Article 8.1 Sequence of examinations

1. Students may participate in interim examinations [or practical exercises] of the components below only if they have passed the interim examination or examinations for the components mentioned hereinafter:
 - a. Minor Internship after passing 18 EC of compulsory courses;
 - b. Major Internship after passing minor Internship;
 - c. Literature Study after passing minor Internship.

2. When the master program would like to give a student the opportunity to start earlier with a minor internship, major internship or literature thesis due to certain circumstances, the Examination Board ECRO (Epidemiology, Cardiovascular Research and Oncology) is allowed to make an exception for 8.1 a, b and c.

Article 8.2 Validity period of results

1. The validity period of the interim examinations and exemptions from interim examinations below, is limited as follows:
 - a. The period of validity of interim examinations is 3 years, as of the subsequent academic year in which the interim examination has been taken.
 - b. The period of validity for exemptions is 3 years, as of the year the interim examination is granted.
 - c. The examination board can extend the validity of an examination or exemption when the student files a motivated request. When the standardized knowledge of the examination is clearly outdated, or if the qualifying skills are clearly outdated, the Examination Board can impose an additional examination, impose an alternative examination or refuse the validity period.

Part B2: Program specific section - content of program

9. Program objectives, specializations and exit qualifications

Article 9.1 Workload program

1. The program has a workload of 120 EC.

Article 9.2 Specializations

The master program offers two different tracks:

- Imaging and Personalized Medicine (VU)
 - Cardiovascular Sciences (joint program track with the UvA)
- Students that started the master Cardiovascular Research before 2022-2023 will continue and graduate from the program in the track Cardiovascular Sciences at the Vrije Universiteit.
 - Students that start the master Cardiovascular Research in 2022-2023 will start in the track Imaging and Personalized Medicine.
 - Students that would like to start with the track Cardiovascular Sciences from 2022-2023 onwards apply at the Master Biomedical Sciences, UvA.

Article 9.3 Program objectives

The aim of the Master Cardiovascular research program is to train and educate students with a biomedical or Life Sciences Bachelor's degree to obtain a Master's degree.

The final program qualifications (assessment criteria) are focused on the ability to address complex research questions and to perform independent state-of-the-art research in the field of clinical life sciences. This is a research master program. The program qualifications should therefore comply to a research standard for what we call a “novice researcher”: a scientist at the start of a full academic career, and we therefore developed a profile with end qualifications. Within the Master Cardiovascular research program, four roles for a novice researcher have been defined that are based on the CanMEDS (Canadian Medical Education Directions for Specialists) system, and have been adapted for research. The four roles in order of importance are “scholar”, “collaborator”, “communicator” and “manager”. Each role requires distinct competences (Article 9.4, Table 1). These competences are employed as the final qualifications of this master program.

Article 9.4 Program competences

1. In all events, a graduate of the degree program will have the attainment level as described in Table 1.

Table 1: Roles of the novice researcher.

Role 1 Scholar	
The novice researcher keeps his/her own knowledge and skills up-to-date and transfers scientific knowledge to others. He/she works independently in a professional manner in the process of drafting, implementing and evaluating areas of research. The novice researcher steers the own professional development.	
1.1	The novice researcher keeps his/her own knowledge up-to-date.
1.2	The novice researcher performs research independently.
1.3	The novice researcher efficiently familiarizes him- or herself with a new area of research.
1.4	The novice researcher exhibits adequate professional behavior.
1.5	The novice researcher is able to steer his/her own professional development.

Role 2 - Collaborator	
The novice researcher participates effectively and appropriately in a multidisciplinary research team and in the inter-collegial peer review processes. He/she is able to build a network of contacts and to use them adequately.	
2.1	The novice researcher participates effectively in a multidisciplinary research team.
2.2	The novice researcher makes adequate use of networks in the research field.
2.3	The novice researcher participates in the inter-collegial peer review process.
Role 3 - Communicator	
The novice researcher gives oral and written reports of the research to colleagues in their own discipline and to other stakeholders. The novice researcher participates in scientific discussions and debates and takes a stance in such discussions and debates.	
3.1	The novice researcher provides verbal and written reports of the research to colleagues in his/her own discipline and to other stakeholders.
3.2	The novice researcher participates in scientific discussions on research.
3.3	The novice researcher participates in the public debate on research.
Role 4 - Manager	
The novice researcher organizes his/her own research adequately within the applicable quality and financial frameworks, in order to achieve the set goals.	
4.1	The novice researcher can organize and manage scientific research.
4.2	The novice researcher understands the financial aspects of research.
4.3	The novice researcher contributes to the quality improvement of research and of the research institute.

Article 9.5 Language of instruction

1. The language of instruction is English.
2. The 'Gedragscode vreemde taal' (code of conduct foreign languages) applies.

10. Curriculum Structure

Article 10.1 Composition of the program

1. The program consists of the following components as shown in Figure 1:
 - a. Compulsory units of study (33 EC)
 - b. Optional units of study (12 EC)
 - c. Minor / Major Internship (30 and 36 EC)
 - d. Literature Study (9 EC)

Compulsory Courses 30 ECTS		Minor Internship 30 ECTS		2 year program, 120 ECTS
Academic Core (Year 1)				
Optional Courses 12 ECTS	Literature Thesis 9 ECTS	Major Internship 36 ECTS <i>Master Thesis</i>		
Academic Core (Year 2) 3 ECTS				

Figure 1: Composition of the master program.

2. Educational components are categorized as specialized (400), research oriented (500) and highly specialized (600) level.

Article 10.2 Compulsory units of the program

1. The compulsory units of the program for students that started the program before 2022-2023 (Track Cardiovascular Sciences) are:

Title	Code	Number of EC	Period	Teaching method	Test type	Level
Year 1						
Heart and Circulation	M_CHCBP16	6	Period 1	Lectures, workgroups, self-study	Written examination, assignments	400
Cardiac Disease	M_CCDMDT16	6	Period 1	Lectures, workgroups, self-study	Written examination, assignments	400
Diabetes and Vascular Disease	M_CDVDMDT16	6	Period 2	Lectures, workgroups, self-study	Written examination, assignments	400
Advanced Imaging	M_CFAISC16	6	Period 2	Lectures, workgroups, self-study	Written examination,	400
Writing a Research Proposal	M_FWRP18	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	M_CACCOREA14	0	Semester 1 and 2	Lectures, workgroups, self-study	Lectures, workgroups, self-study	500
Minor Internship	M_CMINORI16	30	Semester 2	Practical work, work discussion	Report, presentation, practical work	400
Year 2						
Academic Core	M_CACCOREB14	3	Year 1 and 2	Lectures, workgroups, self-study	Assignments	500
Literature Study	M_CLITSTU16	9	Semester 1-2	Work discussions	Report, presentation	500
Major Internship	M_CMAJORI16	36	Semester 1-2	Practical work, work discussion	Thesis, presentation, practical work	500

2. The compulsory units of the program for students that started the program in 2022-2023 (Track Imaging and Personalized Medicine) are:

Title	Code	Number of EC	Period	Teaching method	Test type	Level
Year 1						
Basics of Clinical Research and Regulations	M_CBCRR22	6	Period 1	Lectures, workgroups, self-study	Written examination, assignments	400

Imaging Principles	M_CIP22	6	Period 1	Lectures, workgroups, self-study	Written examination, assignments	500
Personalized Medicine	M_CPM22	6	Period 2	Lectures, workgroups, self-study	Written examination, assignments	500
Drug Targets and Nanomedicine	M_CDTN22	6	Period 2	Lectures, workgroups, self-study	Written examination,	500
Writing Research Proposal ^a	M_FWRP18	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	M_CACCOREA14	0	Semester 1 and 2	Lectures, workgroups, self-study	Lectures, workgroups, self-study	500
Minor Internship	M_CMINORI16	30	Semester 2	Practical work, work discussion	Report, presentation, practical work	400
Year 2						
Academic Core	M_CACCOREB14	3	Year 1 and 2	Lectures, workgroups, self-study	Assignments	500
Literature Study	M_CLITSTU16	9	Semester 1-2	Work discussions	Report, presentation	500
Major Internship	M_CMAJORI16	36	Semester 1-2	Practical work, work discussion	Thesis, presentation, practical work	500

To pass a compulsory unit, students must obtain a minimal grade of 5.50 for all test types that are part of this compulsory unit. More information about the compulsory units are described in the study guide.

Article 10.3 Elective educational components

1. The Faculty of Medicine VU Amsterdam offers the following electives:

Title	Code	Number of EC	Period	Teaching method	Test type	Level
Biobusiness course	M_OBIOBUS10	3	3-4	Lectures, Work groups, Self-study	Assignments	500
Proteomics in Biomedical Sciences	M_CPROTBIO09	3	3-4	Lectures, Laboratory project, Literature presentation, Self-study	Exam	500
Cardiac Development	M_CCARDE18	3	Semester 1	Lectures, Work groups, Self-study Practicals	Exam	500

Students need to obtain advance permission from the Examination Board for optional courses in advance. Students can also apply for courses at other faculties or universities, for which they need to provide the program of the course, the level, the examination and their own study plan including results thus far. The total amount of EC for the optional courses is 12 EC.

Article 10.4 Practical exercise

1. Practical exercises are described in Section B2 Article 10.2 of this OER.

Article 10.5 Participation in practical exercise and tutorials

1. In the case of a practical training, the student must attend 100% of the practical sessions. Should the student attend less than 100%, he/she must repeat the practical training, or the Examination Board may have one or more additional assignments issued.
2. In the case of tutorials with assignments, the student must attend 100% of the tutorials. Should the student attend less than 100%, the student must repeat the study group, or the Examination Board may have one or more additional assignments issued.
3. In exceptional circumstances, the Examination Board may, at the request of the student, permit an exemption (a maximum of 30 EC) from this requirement if it is evident that the intended skills have been acquired.

Article 10.6 Maximum exemption

1. 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).

11. Evaluation and transitional provisions

Article 11.1 Evaluation of the education

1. The education provided in this program is evaluated in accordance with the evaluation plan which is published on CANVAS. The faculty evaluation plan offers the framework.

Article 11.2 Transitional provisions

1. By way of derogation from the Teaching and Examination Regulations currently in force, the following transitional provisions apply for students who started the program under a previous set of Teaching and Examination Regulations:
 - a. For students registered before 2018-2019, the course code M_FWSE09 still apply.
 - b. For students registered before 2022-2023, the course codes M_CHCBP16, M_CCDMDT16, M_CDVDMDT16 and M_CFAISC16 still apply.

Advice and approval by the Program Committee, on 24-01-2022

Approved by the Faculty Joint Assembly, on 22-02-2022

Adopted by the board of the Faculty on 22-02-2022