

Education and Examination Regulations 2022-2023 for the Master of Science programme *Epidemiology* of the Faculty of Health, Medicine and Life Sciences, Maastricht University, in accordance with Article 7.13 of the Dutch Higher Education and Scientific Research Act (*Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek, WHW*)

These regulations have been adopted by the Dean of the Faculty of Health, Medicine and Life Sciences after advice of or consent from the Programme Committee (*Opleidingscommissie*) and after consent from or in consultation with the Faculty Council (*Faculteitsraad*) on 12 July 2022.

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SECTION 1 GENERAL PROVISIONS

Article 1.1 Applicability of the regulations

1. These regulations apply to the education, exams and the examinations of the Master of Science programme in Epidemiology, hereafter referred to as 'the programme'.
The programme is provided by the Faculty of Health, Medicine and Life Sciences of Maastricht University, hereafter referred to as 'the faculty'.
2. These regulations apply to all students who participate in the programme in the academic year 2022-2023 and replace, in principle, all other regulations.
3. The replacement of the former regulations by these new ones may not disadvantage students that started the programme when former regulations were applicable. In cases where the new regulations disadvantage students, the old regulations are applicable.
4. Contrary to the content of article 1.1 sub 2 and 3, the educational programme which was valid at the moment that the student started with the educational programme, including the exams, is still applied for the student.
5. These regulations also apply to students from other programmes, faculties or institutions of higher education, insofar as they follow components of the programme to which these EER apply.
6. For components of the programme that students follow at another degree programme, faculty or institution of higher education, the EER for the other programme, faculty or institution apply to the component in question.

Article 1.2 Definitions

In these regulations, the following terms and definitions apply:

- a. the Act: the Dutch Higher Education and Scientific Research Act (*Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek*);
- b. student: a person who is registered at the university for education and/or to take exams and the examination of the programme;
- c. course: a study unit of the programme within the meaning of the Act; and consisting of one or more educational components, such as group meetings, practical training or written papers with the exclusion of the thesis;
- d. academic year: the period from 1 September of a calendar year up to and including 31 August of the following calendar year;
- e. programme: the master's programme referred to in Article 1.1 of these regulations, consisting of a coherent whole of courses;
- f. specialisations, if applicable: any one of the feasible sub-programmes available in a master's programme;
- g. exam: a component of the examination as referred to in Article 7.10 of the Act;
- h. educational components/activities: training as referred to in Article 7.13(2)(d) of the Act, in one of the following forms:
 - writing a paper or performing another written assignment;
 - performing a research assignment;
 - participating in field work or a field trip;
 - participating in an activity intended to develop certain skills;
 - participating in tutorials, lectures, project groups and study groups;
 - completing a placement;
 - writing a master's thesis.
- i. placement: a period in which a student performs their research under supervision, at Maastricht University or another institution;
- j. thesis: a written report, reflecting the work accomplished during a placement period;
- k. registration: the administrative recording of the passing results of an exam;
- l. examination: the final examination of the master's programme;
- m. credit: a unit expressed in ECTS credits, with one credit equalling 28 hours of study;
- n. board of examiners: the board examiners referred to in Article 7.12 of the Act;
- o. board of admission: the board responsible for judging the admissibility of the candidate to one of the master's programmes;

- p. examiner: the person designated by the board of examiners to administer exams and to determine the results of such exams;
- q. course coordinator: an examiner who is responsible for the content of the education for a particular course;
- r. faculty board: the faculty board referred to in Article 9.12 of the Act;
- s. Rules and Regulations: additional rules associated with the Education and Examination Rules;
- t. UM: Maastricht University;
- u. course catalogue: the programme guide which includes further details about programme-specific provisions and information, which is provided via the student-portal.

The other terms have the meaning given to them by the Act.

SECTION 2 ADMISSION

Article 2.1 Responsibilities

The Dean of the Faculty of Health, Medicine and Life Sciences has given the responsibilities of the admission to the board of admission to oversee the applications for the master's programme. The board of admission will make the final decision of those applicants who will gain admittance into a master's programme, based upon the admission requirements.

Article 2.2 Admission requirements

1. Applicants awarded a relevant bachelor's or master's degree from a university are eligible for admission to the master's programme. A list of relevant programmes is published on the UM website.
2. Applicants awarded a relevant bachelor's degree from a university of applied sciences (HBO in Dutch) and sufficient academic skills are eligible for admission to the master's programme. A list of relevant programmes as well as the additional requirements are published on the UM website.
3. In addition to the above (paragraphs 1 and 2) applicants who have demonstrated proficiency in the English language, either automatically or by showing language tests certificates (see the UM website) are eligible for admission to the master's programme.
4. For this master's programme the UM application deadlines apply. These deadlines are published on the UM website.

Article 2.3 Language requirements with non-Dutch diplomas

1. Holders of a non-Dutch diploma can only register if they have met the minimum English language requirement corresponding to IELTS (international English Language Testing System) with a score of at least 6.5.
2. The requirement referred to under (a) is met if the person concerned has obtained one of the following diplomas or certificates:
 - o a completed bachelor's or master's study programme where the language of instruction is English;
 - o an International or European Baccalaureate, a US high school diploma or UK GCE A-levels, or
 - o Can demonstrate sufficient proficiency in English, for example through English taught courses, internships or work experience in an English environment, or
 - o can submit one of the following language test certificates, with a minimum score of at least:
 - IELTS: 6.5
 - TOEFL iBT: 90
 - TOEFL iBT Special Home Edition Test: 90
 - TOEIC listening and reading: 720; speaking and writing: 310
 - Cambridge Advanced C1: Grade C (scale 180-184); First: Grade A (scale 180-184); First B2: Grade B (scale 176-179)
 - TOEFL Paper-delivered Test: Reading: 20-30; Listening: 20-30; Writing: 20-30

SECTION 3 CONTENT AND STRUCTURE OF THE PROGRAMME

Article 3.1 Aim of the programme

1. The programme is intended to:
 - provide academic education as set out in the educational concept and profile of Maastricht University;
 - provide a broad-based learning experience within the scientific field of the programme;
 - prepare the student for a professional career in the field of Epidemiology (see also Appendix 1).
2. The programme contains sufficient elements for the academic and intellectual development of students, above all:
 - independent scientific thinking and performance;
 - scientific communication;
 - handling professional knowledge and skills in a social setting.
3. The programme's educational activities are based on core values and norms laid down in the Maastricht University Rules of Conduct and the principles of research integrity and the ensuing guidelines for good research practices as laid down in the Netherlands Code of Conduct for Research Integrity (see UM website).

Article 3.2 Form of the programme

1. The programme is offered on a full-time and part-time basis.
2. The programme commences once a year in September.

Article 3.3 Language of instruction

1. Throughout the programme and in all exams the English language will be the standard.
2. It is not allowed to use dictionaries during the exams.

Article 3.4 Communications and announcement of decisions

1. The faculty board, the board of examiners and the examiners may use the student portal, e-mail through the UM account or the (faculty) website for communications relating to the programme and examinations.
2. The faculty board, the board of examiners and the examiners may use the student portal, e-mail through the UM account and the (faculty) website to announce decisions.
3. The student must regularly check their university e-mail address, the Faculty website and the digital learning environment. Information disseminated via e-mail, the digital learning environment or the website will be assumed to be known.

Article 3.5 Study Load

The programme has a study load of 60 ECTS.

Article 3.6 Content, structure and ECTS of the programme

The content, structure and ECTS of the programme are described in Appendix 2.

Article 3.7 Flexible programme and flexible masters

1. A student registered for one of the faculty's programmes may, under certain conditions, formulate an educational programme of their own choice which is different from the educational programme stated in Appendix 2. The composition of such a programme must be approved beforehand by the board of examiners.
2. The flexible programme must have a study load of 60 credits.
3. The board of examiners will decide whether to grant permission for the student's proposal within four weeks after it receives the proposal.

4. In granting the permission, the board of examiners will indicate which programme offered by the faculty will include the programme formulated by the student for purposes of the Education and Examination Regulations.

Article 3.8 Examination

1. The courses of the master's programme are listed in Appendix 2.
A registration for completion for each component of the programme must be obtained:
 - the exams, including active participation in the mandatory activities;
 - completing a placement and writing a master's thesis.
2. The board of examiners, with due regard to the Education and Examination Regulations, lays down guidelines pertaining to the norms for and assessment of examinations for each of the courses referred to in Paragraph 1. These guidelines are incorporated in the Rules and Regulations.

SECTION 4 EDUCATION

Article 4.1 Courses; composition; actual design

1. For the programme components, courses are given with the study load stated in Appendix 2.
2. The educational programme consists of study groups, practical training, lectures, individual supervision or otherwise.
3. The educational programme includes 40 weeks per year.

Article 4.2 Attendance and best-efforts obligation

1. Each student is expected to actively participate in the course they are attending.
2. In addition to the general requirement that the student actively participates in the course, the student must participate in at least 75% of the educational activities (with the exclusion of the lectures) unless there are different requirements defined in the course assessment plan.
3. If the student has participated in less than 75% of the activities the course coordinator may give additional assignments to the student.

SECTION 5 ASSESSMENT

Article 5.1 General

1. During a course, the student will be tested for academic and intellectual development and the extent to which the student has sufficiently achieved the stated learning objectives.
2. The assessment plan describes the form of the exams, the achievements the students must make to pass the course and the criteria on which the student is assessed. The assessment plan is published on the FHML student intranet.
3. The Rules of Procedure at Exams describe the assessment procedure. These rules are published on the FHML student intranet.

Article 5.2 Grades

1. Grades are awarded on a scale of 1 to 10.
2. The final grade for a course or a part of an exam (excluding the thesis) is sufficient if the final grade is '6' or higher (after rounding).
3. The final grade for the thesis will be rounded to one decimal place and is sufficient if the grade is a 6.0 or higher.
4. When a component of the examination is graded with a qualification, the student has to obtain at least a 'Pass' for this component.
5. The way grades are rounded off is determined in the Rules and Regulations.
6. The highest result attained determines the final grade.

Article 5.3 Order of exams

1. Students are not admitted to a course exam unless they have fulfilled the obligation to attend mandatory educational activities for the relevant course. In appropriate cases, a student may be conditionally admitted to an exam at their request, pending a final decision on admissibility from the board of examiners.
2. Permission to start with the module 'Writing a Research Proposal' is only obtained under the condition that the student has submitted a concept paper 'Writing a Research Question and Outline', that is deemed 'gradable' by the examiner;
3. A student will be permitted to start with a placement if they have achieved at least 12 ECTS for the preceding master's courses, has a Pass for the module 'Writing a research question and outline' and has submitted a concept research proposal;
4. In addition to the requirements mentioned in paragraphs 2 and 3, permission to start writing the thesis is only obtained under the condition that the student has received a passing grade for the research proposal.

Article 5.4 Scheduling and frequency of the exams

1. Students can take exams twice a year on dates determined by the faculty board: once during or at the end of the course period (first sit for the exam) and once during the academic year (resit option).
2. In exceptional cases, the board of examiners can decide that an exam may be taken at another time than determined in accordance with paragraph 1 of this Article but in any case during the same academic year.

Article 5.5 Form of the exams

1. In principle, there are written exams. 'Written exams' also include computer-based exams. The examiner may decide that, because the number of students is small or because of the nature and content of a course, an exam will be oral or will include one or more written essays, which may or may not have to be explained orally. The examiner will announce any such decision no later than two weeks before the scheduled exam date.
2. Practical tests may include skills, participation, attitude and professional behaviour. The format and judgement criteria of practical tests will be announced in the (electronic) course book and/or during the introduction to the course.
3. The board of examiners reserves the right to allow other forms of examination, including testing of group work and portfolio. The structure and judgement criteria of the exams will be announced in the student portal.
4. Upon request, students with a disability may take exams in a manner which accommodates their specific disability as much as possible. If necessary, the board of examiners will obtain expert advice before taking a decision in such matters.

Article 5.6 Oral exams

1. Oral exams are taken only by one student at a time, unless the board of examiners decides otherwise.
2. An oral exam is given by the examiner in the presence of a lecturer [second examiner], unless the board of examiners has decided otherwise.
3. Oral exams take place in public, unless the board of examiners or the relevant examiner decides otherwise in a special case or if the student objects to this.
4. Contrary to what is described in paragraph 3 an oral exam will not take place in public when this oral exam is a regular part of the assessment of the course.

Article 5.7 Placement and Thesis

1. The board of examiners lays down the requirements with regards to the nature and content of the placement in separate rules. These rules are published on the FHML student intranet and are considered to be part of the Rules and Regulations.
2. A placement coordinator is assigned to the master. The placement coordinator is responsible for granting proposed research topics admissible.

3. The board of examiners appoints an examiner as faculty supervisor/1st examiner for the placement and thesis and a 2nd examiner for the thesis. The faculty supervisor/1st examiner has expertise on the thesis topic or on the envisaged methods.
4. The placement coordinator supports the appointment of the faculty supervisor/1st examiner for the placement and thesis and the 2nd examiner of the thesis.
5. The student may undertake a placement supervised by the faculty only once during the master's programme.
6. The thesis must be written individually.

Article 5.8 Determination and announcement of exam results

1. The board of examiners determines the standards for assessing each examination component. The standards are included in the Rules and Regulations.
2. The examiner determines the result of a written exam and provides the Education Office with the necessary information to apprise the student of the result within 15 working days of the date on which it was taken.
3. The examiner determines the result of an oral exam within one working day after it is taken. If more than one student takes the same exam after each other, this period may be extended by up to five working days.
4. When the result of a written exam is announced, it will be indicated how the student can inspect the exam and file an appeal as referred to in Article 6.4.

Article 5.9 Right of inspection

1. Within 10 working days of the date on which the result of a written exam, including a computer-based exam, is announced, students may, upon request, inspect their evaluated work.
2. Together with or before the announcement of the result of a written exam, it is stated how students can inspect their reviewed test.
3. Contrary to what is described in paragraph 1 the term of 10 working days can be extended in particular circumstances (vacation or public holidays). In this case, the teacher must announce in time when students can expect their results and when students can inspect their work.

Article 5.10 Registration of courses

A registration for completion of a course, and therefore the course-related credits, is obtained once all requirements with regard to the components of the course have been met.

These requirements include:

- *where applicable*: active participation in the group meetings;
- *where applicable*: participation in the practical exercises, including oral and/or written reports;
- *where applicable*: satisfactory completion of papers;
- a final course grade of 5.5 or higher.

Article 5.11 Period of validity

1. Exams which have been passed are valid for an unlimited period.
Contrary to the above, the board of examiners may require the student to take an additional or replacement exam or exam component for an exam which was passed more than six years ago if the student's knowledge or insight that was examined is demonstrably outdated or the skills that were examined are demonstrably outdated.
2. If exceptional circumstances apply as referred to in Article 7.51 paragraph 2 of the Act, the period of six years in paragraph 1 will be extended by the duration of the financial support the student receives from the profiling fund.

Article 5.12 Invalidation of exams

If an exam involves irregularities that make it impossible to accurately assess the student's knowledge, insight and skills, the board of examiners may declare the exam invalid for both the examinee and a group of examinees.

Article 5.13 Retention period for tests

1. The exercises, answers and the evaluated work of the written exams will be retained in paper or digital form for two years after the exam/examination result is determined.
2. The final theses and the evaluation of theses will be kept for seven years after the evaluation.
3. The procedure concerning to the archiving of exams is published in Canvas.

Article 5.14 Exemption

1. The board of examiners may, at a student's request, grant the student an exemption from taking a course including one or more exams if they demonstrate in writing to the board of examiners' satisfaction that they previously:
 - either passed an exam for a university programme which was similar in terms of content and level or
 - gained sufficient knowledge and skills relevant to the exam concerned, either through work or professional experience.
2. An exemption may only pertain to an entire course and not a component thereof.
3. At most 20% of the credits for the programme may be earned based on the exemptions granted.
4. The master's thesis is excluded from this exemption option.
5. In order to qualify for an exemption, a student has to submit a written request to the board of examiners within a minimum of 6 weeks prior to the start of the relevant course.
6. The board of examiners will not grant any exemption based on exams passed by a student outside the programme during the period in which the student was barred by the board of examiners from taking exams for the programme because of fraud.

Article 5.15 Fraud

1. 'Fraud', including 'plagiarism', means actions or omissions by a student which make it impossible in whole or in part to properly evaluate their knowledge, understanding and skills.
2. 'Plagiarism' means the presentation of ideas or words from one's own or someone else's sources without proper acknowledgment of the sources.
3. If the board of examiners determines that a student has engaged in fraud with respect to an exam or exam component, the board of examiners can take appropriate measures.
4. In serious cases of fraud, the board of examiners can propose to UM's Executive Board that the student(s) concerned be permanently deregistered from the programme.
5. The General FHML/UM-Regulations for Fraud and Irregularities specifies which sanctions the board of examiners can apply.

Article 5.16 Unsuitability (*Iudicium Abeundi*)

1. In exceptional circumstances and after carefully weighing the interests at stake, the board of examiners may, stating reasons, ask the dean to request that the Executive Board terminate or deny a student's registration for a programme if, through their conduct or statements, the student shows that they are unsuitable to practice one or more professions for which the programme is training the student or is unsuitable for the practical preparation for the profession.
2. If the faculty dean is asked by the Executive Board for a recommendation on a proposed termination or denial of registration based on the reasons stated in paragraph 1, the dean will in turn ask for a recommendation from the board of examiners. The recommendation to the dean will be supported by reasons.

SECTION 6 EXAMINATION

Article 6.1 Examination

1. The board of examiners determines the result and date of the examination and issues the certificate as referred to in Article 6.3 as soon as the student has satisfied the requirements for the examination programme.

2. Prior to determining the result of the examination, the board of examiners may conduct their own investigation of the student's knowledge regarding one or more components or aspects of the programme if and insofar as the results of the relevant tests give reason to do this.
3. To pass the examination, the student must pass all components.
4. To pass the examination and receive the certificate, the student must also have been registered for the programme during the period that the exams were taken.
5. A certificate may only be issued after it has been shown that the student has satisfied all the obligations, including paying the tuition fees.
6. The last day of the month in which the student satisfied all the examination obligations will be considered the examination date (graduation date).
7. Students who have passed the examination and who are entitled to the issuance of a certificate may, stating reasons, ask the board of examiners not to do this yet.
This request must be submitted at least one month before the final assignment is turned in or the final exam is taken.

The board of examiners in any event grants the request:

- if the student is selected by the faculty for a double degree, an extracurricular placement or an extracurricular exchange, or
- if the student has held/will hold a board position for which a financial support from the 'Profileringsfonds' will be granted for at least nine months, or a Student Introduction Committee ('INKOM') board position.

The board of examiners may also grant the request if refusal would result in an exceptional case of extreme unfairness because of the fact that the student concerned could not have taken the automatic graduation into account when they were planning their study.

Article 6.2 Degree

Students who have passed the examination will be awarded the degree 'Master of Science'.

Article 6.3 Certificate and statements

1. As proof that the examination was passed, the board of examiners issues a certificate, after it has been stated by or on behalf of UM's Executive Board that the procedural requirements for receiving the certificate have been met. The certificate is based on the model that UM's Executive Board has adopted. One certificate will be issued per programme, even if the student completes several specialisations or tracks.
2. The certificate that the examination has been passed also indicates:
 - a. the name of the institution;
 - b. the name of the programme;
 - c. the examination components;
 - d. the degree awarded;
 - e. the date on which the programme was most recently accredited or was subjected to the new programme test;
3. Students who are entitled to the issuance of a certificate may, stating reasons, ask the board of examiners not to do this yet (pursuant to Article 6.1 sub 7).
4. The certificate is signed by the chair of the board of examiners or an appointed substitute and the faculty dean or an appointed substitute.
5. The certificate is awarded in public, unless the board of examiners decides otherwise in exceptional cases.
6. The certificate includes a list of the examination components.
7. The board of examiners includes a diploma supplement as referred to in Article 7.11(4) of the Act with the certificate. This diploma supplement is based on the model adopted by UM's Executive Board, which is in compliance with the agreed European standard format.
8. The board of examiners may award the '*cum laude*' designation in accordance with the provisions in the Rules and Regulations.
9. A student who has passed at least one exam and who cannot be issued a certificate will upon request, receive a statement issued by the board of examiners which indicates the exam(s) which they passed.

Article 6.4 Right of appeal

Within six weeks after a decision by the examiner and the board of examiners is announced, the student may appeal this decision to UM's Complaint Service Point.

The appeal must be signed, must include a date and the name and address of the party lodging the appeal, must indicate the grounds for the appeal and, if possible, must include a copy of the decision being appealed.

SECTION 7 STUDY GUIDANCE

Article 7.1 Study progress administration

The faculty records the students' individual study results and makes them available for the student through the student portal.

Article 7.2 Study guidance

The faculty will provide for the introduction and study guidance for students registered for the programme.

SECTION 8 TRANSITIONAL AND FINAL PROVISIONS

Article 8.1 Amendments

1. Amendments to these regulations may be adopted in a separate decision by the faculty board, after a recommendation from the programme committee and after consent from or consultation with the faculty council.
2. An amendment in these regulations will not pertain to the current academic year, unless the interests of the students will not reasonably be harmed as a result.
3. In addition, amendments may not affect, to the students' detriment, a decision regarding a student which has been taken by the board of examiners pursuant to these regulations.

Article 8.2 Notice

The faculty board ensures that proper notice is given of these regulations, the rules and regulations adopted by the board of examiners, and any changes to these documents, by, for example, placing such notice on the faculty website and on the FHML student intranet.

Article 8.3 Evaluation

The faculty board will ensure that the education of the programme is regularly evaluated, assessing at least – for the purpose of monitoring and if necessary adapting the student workload – the amount of time students need to complete their duties as set out therein.

Article 8.4 Unforeseen cases/safety net scheme

1. In cases not covered or not clearly covered by these regulations, decisions are taken by or on behalf of the faculty board, after it has consulted with the board of examiners.
2. In individual cases in which application of the Education and Examination Regulations would lead to manifestly unreasonable results, the board of examiners can deviate from the stated regulations in the student's favour.

Article 8.5 Effective date

This Regulation will come into force on the 1st of September 2022 and will apply to the academic year 2022/2023.

Appendix 1: Aim of the programme

Knowledge and understanding

Students have obtained basic to advanced knowledge and understanding of:

- EA1. The scope of epidemiology as a scientific discipline, its concepts, principles and methods, and the uses of epidemiological methods and techniques in various fields of application.
- EA2. Epidemiological measures of disease frequency, association and effect/impact.
- EA3. Epidemiological study designs, like cross-sectional study, cohort study, case-control study, case-cohort study, nested-case control study, diagnostic study, prognostic study and intervention study (controlled trial).
- EA4. Procedures for the collection, processing and management of epidemiological data.
- EA5. Concepts of validity, bias (e.g., selection bias, information bias, confounding), effect modification/interaction and precision; tools to prevent, identify and adjust for bias (e.g., randomization, blinded measurement, stratified data analysis); and issues regarding the interpretation of biased or imprecise study results (e.g., causal reasoning, generalization).
- EA6. Principles of exposure and outcome measurement in health and medicine (clinimetrics) and measurement properties (validity, reliability, responsiveness) of measurement instruments.
- EA7. Epidemiological and statistical methods of data analysis, like person-year analysis, life-table analysis, methods to adjust for confounding (direct and indirect standardization, stratified analysis, multivariable regression analysis techniques), survival analysis, and methods for longitudinal and multi-level data analysis.
- EA8. Principles and methods of meta-analysis and systematic literature review.
- EA9. Core concepts and methods of molecular and genetic epidemiology, such as nested study designs, genetic epidemiological studies, Mendelian randomization studies, and potential sources of bias and confounding introduced to studies when using biomarkers in epidemiologic studies..
- EA10. Core concepts and methods of two elective topics within or related to epidemiology, namely epidemiology of infectious diseases, clinical data science, clinical prediction models, qualitative research and health technology assessment.
- EA11. (Inter)national guidelines regarding conduct and reporting of (epidemiological) research.

Applying knowledge and understanding

Students are able to apply the acquired knowledge and understanding of epidemiological concepts, measures, study designs and data analysis techniques to:

- EB1. The critical assessment and interpretation of epidemiological publications and presentations (research protocols, original articles, scientific reviews, health policy documents, statements in the lay press).
- EB2. Designing a sound protocol for any type of epidemiological study – cross-sectional, cohort, case-control, diagnostic, prognostic, intervention, prediction, clinimetric, systematic literature review with meta-analysis – in various fields of application, including the background, selection and recruitment of study population, choice of measurement instruments, and choice of statistical data analysis techniques.

- EB3. The proper conduct and implementation – under supervision - of an epidemiological study of limited extent, covering at least the two final phases of the empirical research cycle (data analysis and critical reporting & presentation of findings).
Within this context the student should be able to make a data analysis plan, perform calculations and statistical analyses with epidemiological data independently, but coached and confirmed by a supervisor.
- EB4. Active participation in meetings and discussions, and issuing critical comments, reviews and assessment reports on epidemiological issues.
- EB5. Conduct and reporting of epidemiologic research according to (inter)national guidelines on good publication practice and ethics.

Making judgments

Students are able to critically judge:

- EC1. The methodological quality, practical applicability and ethical justification of epidemiological research, including specific methodological issues regarding the design, conduct and analysis of epidemiological studies.
- EC2. The existing evidence for the impact and (causal) effects on health of environmental, behavioural, biological and molecular risk factors, prognostic factors and planned health interventions.
- EC3. The methodological quality and applicability of measurement instruments.
- EC4. The appropriateness of epidemiological research output for dissemination and application within various settings, e.g., health planning, individual patient care, and health counselling.
- EC5. Take a balanced view towards the potential impact of epidemiological study activities on study subjects and other persons involved, both at the individual and at the community level (e.g., obtrusiveness of measurement and treatment procedures, privacy considerations, dealing with uncertainty).

Communication

Students are able to adequately communicate and discuss:

- ED1. Methods and results of various types of epidemiological studies and the interpretation of epidemiological data with epidemiologists, experts of related disciplines (e.g., clinicians) and lay people by means of reading, writing, discussions and presentations.

Learning skills

Students have developed new learning skills, which enable them to:

- EE1. Identify, assess and make themselves familiar with new developments in the field of epidemiology in an efficient and critical way.
- EE2. Reflect critically on the quality of their own and research efforts and that of others.
- EE3. Proceed to a more advanced level of epidemiological knowledge, understanding and skills, in particular the PhD level.

Appendix 2: The structure of the programme, including the ECTS

In most courses also practical training is scheduled and skills are trained. These trainings and skills are part of the course.

Epidemiology

- Introduction to Epidemiology (1 ECTS)
- Intervention Research in Healthcare (5 ECTS)
- Clinimetrics (5 ECTS)
- Writing a research question and outline (1 ECTS)
- Meta-analysis (3 ECTS)
- Observational Research (6 ECTS)
- Topics in Epidemiology (6 ECTS)
- Molecular and Genetic Epidemiology (3 ECTS)
- Advanced Statistical Analysis Techniques (6 ECTS)
- Writing a Research Protocol (6 ECTS)
- Placement and Thesis (18 ECTS)

Appendix 3. Language of instruction

For an **English only** programme:

Master of Epidemiology

The choice for the language of instruction of the programme is in line with the UM Code of Conduct on language in accordance with the Dutch Higher Education and Research Act (WHW) art. 7.2.

Because of the specific educational nature and profile of the Master of Epidemiology, teaching and examinations are conducted in English. This guarantees the quality of education, because:

- The content of the programme has an international orientation and focus. Almost all epidemiological handbooks, articles and materials are in English language and the academic communication and exchange is in English.
- The Dutch epidemiological community is internationally oriented and the staff is international. The staff is involved in different international collaborations and projects which are often presented to the students. The annual meeting of the Netherlands Epidemiological Society is in English.
- The labour market demand is internationally oriented. Alumni are expected to be able to communicate oral and written in English. Alumni of the master are employed in Sweden (Karolinski University in Stockholm), Germany (e.g. German Cancer Research Centre), Australia (e.g. University of New South Wales), New Zealand, United Kingdom, United States, et cetera. To receive personal grants (e.g. NWO) in the professional career, international experience is a vital prerequisite.