Faculty of Science, Leiden University

and

Faculty of Technology, Policy and Management, Delft University of Technology

Board of Examiners Rules and Guidelines for the Industrial Ecology Master's programme, 2021-2022

Corresponding to the Course and Examination Regulations of the Industrial Ecology Master's programme

These Rules and Guidelines apply to the specialisations within the Master's programme:

- 1. Industrial Ecology
- 2. Circular Economy (CIRCLE)

Article 1. Area of application

These Rules and Guidelines apply to the examinations, practicals and final examination of the Industrial Ecology Master's degree programme consisting of two specialisations, referred to hereinafter as 'the programme'.

Article 2. Definition

The definitions of the terms used in these Rules and Guidelines are those used in the 'Course and Examination Regulations' and the 'Implementation Regulations' of the Master's Programme on Industrial Ecology, referred to hereinafter as 'exam regulations'.

Article 3. Composition of the Board of Examiners and the day-to-day operations of the Board of Examiners

- 1. The Board of Examiners for the programme (referred to hereinafter as 'the BoE') shall be appointed jointly by the faculty board of the Faculty of Science, Leiden University, and dean of the Faculty of Technology, Policy and Management, Delft University of Technology.
- 2. The BoE shall appoint a chairman and a vice-chairman from among its members, who are charged with dealing with the day-to-day operations of the BoE.
- 3. An official secretary may be assigned to the Board of Examiners.
- 4. In accordance with Article 7.12a of the Higher Education and Research Act, the BoE has at least one external member not involved in the programme.
- 5. None of the members of the Board of Examiners carries any financial responsibility for the programme.
- 6. The Programme Director, Study Advisor, and Programme Coordinator may act as advisors to the BoE.

Article 4. Duties and powers of the Board of Examiners

The Board of Examiners is the body charged with objectively and competently determining whether a student fulfils the conditions laid down in the OER regarding the knowledge, understanding and skills required for obtaining a degree. The Board of Examiners has the following tasks and responsibilities:

General tasks

- a. assuring the quality of the examinations and final examinations;
- b. assuring the quality of the organisation and procedures relating to examinations and final examinations;
- c. compiling an annual report of its activities for the Faculty Board;

Degree programme and examination

d. granting permission for a student to compile and follow an individual curriculum,

- as referred to in Article 7.3h of the Act, the final examination of which leads to obtaining a degree.
- e. in individual cases, approving the choice of course components included in the degree programme; granting exemption from taking one or more examinations on one of the grounds specified in the OER;
- f. presenting the student with a degree certificate and supplement as referred to in Article 7.11(4) of the Act, as evidence of having passed the final examination;
- g. in the case of a student who has passed more than one examination but cannot be awarded a degree certificate as referred to in f. above, issuing a statement showing at least the examinations that he/she has passed;

Examinations and exemptions

- h. establishing guidelines and instructions within the framework of the OER to assess and determine the results of examinations and final examinations, including the pass/fail regulation;
- i. granting exemption from taking one or more examinations on one of the grounds specified in the OER;
- j. where applicable, extending the period of validity of pass results for examinations, as specified in the OER;
- k. in exceptional cases, deciding whether an examination must be taken orally, in written form or in another way, notwithstanding the provisions of the OER;
- I. in exceptional cases, deciding whether an examination must be held in public, notwithstanding the provisions of the OER;
- m.granting exemption from the obligation to participate in practical assignments required for admission to the examination concerned, possibly with the imposition of alternative requirements
- n. in exceptional cases, deciding whether an examination must be taken orally, in written form or in another way, the provisions of the OER;
- o. taking appropriate measures and imposing sanctions if a student or external examination candidate (*extraneus*) is found to have committed fraud;
- p. granting effective measures for following a programme and taking examinations to students with a functional disability as referred to in the Equal Treatment Act on the grounds of handicap or chronic illness;
- q. appointing examiners.

Article 5. Times and dates of examinations

- 1. The BoE shall ensure that written examinations (including digital tests) are held at the times laid down by the BoE no later than the start of the academic year in question, in consultation with the examiners concerned, unless, due to force majeure, the date cannot be announced earlier than five working days in advance¹.
- 2. The times referred to in the first paragraph shall be set in such a way that examinations and practicals will not be held simultaneously.

¹ In line with the principles for education and examinations in the first semester 2021-2022 established by the Executive Board on 8 June 2021, in the case of force majeure the examiner will announce on behalf of the Board of Examiners at least 5 working days prior to the date of the examinations the form in which the examination will take place.

- 3. Any alterations to the times referred to in the first paragraph shall only be made in the event of unavoidable circumstances. Oral examinations shall be held at a time to be determined by the examiner or examiners concerned, in consultation with the examinee.
- 4. The provisions in the third paragraph shall apply mutatis mutandis to non-written and non-oral examinations and practicals.

Article 6. Registering for study components and examinations²

- 1. Students are expected to make use of the first (partial) examination date. Students have to register for the study components as described in Article 2.2 and Article 2.8 (IE) and Article 2.8 and 2.13 (CIRCLE) of the Implementation Regulations. Registration for examinations is compulsory in all cases and must be arranged through the Leiden University registration system, uSis, at least two weeks before the date on which the examination in question is to be held.
- 2. Students may withdraw at any time from an examination or practical for which they have already registered, until 14 days before the examination via uSis or until 8 days before the examination via the programme coordinator.

Article 7. Order during examinations

The programme shall arrange for an invigilator to be present at written or online examinations, who will ensure that they proceed in a correct manner. Students must be monitored at all times throughout the examination, unless otherwise specified in advance by the examiner.

- 1. Examinees must be able to show their proof of enrolment at Leiden University and Delft University of Technology to the examiner or invigilator before the start of the examination.
- 2. Examinees must be able to show proof of their identity using their student card or other legal identity document if requested to do so by or on behalf of the BoE.
- 3. In derogation from the paragraphs 7.2 and 7.3, when examinations are conducted remotely online, the Board of Examiners can specify that the examinee must submit a fully completed 'Declaration of Own Work' before the examination.
- 4. In the case of written examinations that were conducted remotely online, the examiner(s) or invigilator(s) can subject the examinees to a short, non-graded oral test after the examination to verify the authenticity of the work they have done, including on the basis of a random sample. This test must be conducted in the presence of a witness or must be recorded. Examinees will be informed before the examination about whether such an oral authenticity check may take place and, if so, until how many days after the examination.

² If the new registration system of Leiden University is operational, with effect from the second semester of the 2021-2022 academic year, Article 6 will apply: An examination can only be taken and the result assessed if the student has registered to take the examination in line with the procedure in the relevant registration protocol (as referred to in Article 3.5 OER 2021-2022). Paragraph 6.1 and 6.2 are then no longer applicable.

- 5. Examinees must comply without delay with any instructions that are issued by the BoE, the examiner, or the invigilator before, during or immediately after the examination.
- 6. Any examinee who is in breach of or does not comply with the provisions of the second, third, fourth, fifth or sixth paragraph may be excluded by the BoE, the examiner or the invigilator from further participation in the examination concerned. Any such exclusion shall result in no mark being given to the student. Before the BoE, the examiner or the invigilator decides to exclude an examinee, they shall give him or her the opportunity to explain his or her position.
- 7. In exceptional cases the BoE can (in agreement with the examiner) decide to organise the examination in a different form than mentioned at the start of the academic year.
- 8. Written examinations are generally of three hours' duration, although the examiner may deviate from this, in which case he or she should inform the students at the start of the course. The duration of every examination shall be such that the examinee has reasonably sufficient time to answer the questions.
- 9. If an examination is taken (including online or digitally) and a (technical) failure or calamity occurs which means that the examination cannot be continued, the Board of Examiners will decide whether and when a new examination can be scheduled.
- 10. In the case of digital examinations that are conducted remotely, or simultaneously at multiple locations, if an examinee encounters problems with logging in, he/she must immediately contact the examiner. The examiner must inform the examinees in advance about how they can contact him/her during the remote online examination.
- 11. In the case of examinations that are conducted remotely online, the Faculty Boards can decide, on the advice of the Board of Examiners concerned, to permit intensive forms of online proctoring (i.e. in case of recording and temporarily storing of audio and video materials), see Article 8.
- 12. The duration of oral examinations shall be determined by the examiner on a case-by-case basis; examinees shall be informed of the duration before they start. The duration of every examination shall be such that the examinee has reasonably sufficient time to answer the questions.
- 13. Examinees have to write their name and student ID on any assignment, paper, exam or any other work that is handed in.
- 14. During examinations at Leiden University, the regulations for the conduct of examinations of Leiden University apply. During examinations at TU Delft, the regulations for the conduct of examinations of TU Delft apply.

Article 8. Examinations using proctoring

- 1. Students will be informed via Brightspace at least 10 working days in advance of the relevant conditions for taking an examination using proctoring and of the maximum length of the examination.
- 2. Examinees who refuse to participate in an examination with online proctoring must notify the Board of Examiners of this as soon as possible. The examinee

can ask the Board of Examiners for an alternative assessment. The Board of Examiners can decide to allow an alternative assessment or decide that the examinee must wait until the examination can be taken in another form (e.g. on campus).

- 3. By taking part in the examination the student agrees to the recording and collection of data by the proctoring system.
- 4. If the examiner is unable to verify that all the conditions mentioned in this article have been met, the examiner cannot determine whether the examination has been taken in correctly. The Board of Examiners may then declare the examination invalid.

Article 9. Effective provisions for examinees with a functional disability

- 1. A student who has a functional disability as referred to in the Equal Treatment Act is entitled to effective modifications when taking an examination.
- 2. The Board of Examiners will decide on a request for effective modifications, taking into account the legal rules and the Leiden University protocol on studying with a functional disability.
- 3. A request for an effective modification should be submitted by a student to the student dean or the study adviser.

Article 10. Order during practicals

- 1. The examiner responsible for the practical examination shall arrange, if necessary, for assistants to be appointed who will ensure that the practical proceeds in a correct and safe manner.
- 2. Examinees must be able to show proof of enrolment at Leiden University and Delft University of Technology to the supervisor or examiner.
- 3. Examinees must comply without delay with any instructions issued by the supervisor before or during the practical.
- 4. Any examinee who is in breach of or does not comply with the provisions of the second or third paragraph may be excluded by the BoE from further participation in the practical concerned. Any such exclusion shall result in no mark being given to the student. Before the BoE decides to exclude an examinee, they shall give him or her the opportunity to explain his or her position.

Article 11. Fraud, irregularities and plagiarism

- 1. Fraud is understood to mean: any action or omission that makes it completely or partly impossible to form a proper assessment of an individual's knowledge, insights, skills, professional attitude or reflection, including in any event:
 - a. during an examination, including an online examination, or practical assignment, having to hand unauthorised communication devices or documents;
 - b. during an online or other examination or a written assignment, having available unauthorised notes (crib sheets) in the permitted material;
 - c. during an online or other examination or a practical assignment, completely or partly copying the answers of another person;
 - d. during an online or other examination or a practical assignment, exchanging

information with another person;

- e. during an online or other examination or a practical assignment, impersonating another person;
- f. plagiarism (acting in contradiction of the Leiden University Code of Conduct on Plagiarism);
- g. modifying the submitted examination (digital or otherwise) at the inspection;
- 2. Fraud is also taken to mean gaining access or attempting to gain access on improper grounds to the programme, or a constituent examination, practical assignment or examination.
- 3. If fraud is discovered or suspected while an examination is being taken, the examiner or invigilator will immediately inform the student in question and record the incident in writing as quickly as possible. The examiner or invigilator may request the student to make available any evidence. If the student refuses to do so, this will be noted in the report. The report and any evidence will be submitted to the BoE immediately.
- 4. If fraud is discovered or suspected other than while an examination is being taken, the examiner will record the incident in writing as quickly as possible. The report and any evidence will be submitted to the BoE immediately.
- 5. The BoE will give the student an opportunity to add written comments to the report that was prepared by the examiner or invigilator.
- 6. The BoE will make a decision with respect to the case of fraud and can impose the following sanctions on the student depending on the gravity of the case, including repeated incidents of fraud:
 - a reprimand;
 - a decision that a mark will not be issued for the examination or practical in question;
 - exclusion from the examination or practical in question for a maximum period of one year;
 - exclusion from one or more examination periods for a maximum period of one year; or
 - a combination of the measures listed above.
 - If a student is implicated in a serious case of fraud, then the BoE may recommend to the Executive Board that the student's registration in the programme be revoked indefinitely.
- 7. The BoE will not make a decision as referred to in paragraph 5 until after the student has been given an opportunity to be heard. A hearing will not be necessary if the BoE determines that there was no fraud.

Article 12. Examination guestions and assignments

- 1. The sources from which prescribed reading material is taken will be announced in outline before the start of each course. The scope of the prescribed reading material will be definitively announced no later than one month before the date of the examination to which said course relates.
- 2. The examination questions and assignments shall cover the prescribed reading material in equal measure.
- 3. The examination shall be representative of the aims of the course in terms of form and content.

- 4. The questions and assignments will be clearly worded in accordance with the university's language code; the questions will be asked in such a way that the examinee will know how detailed his or her answers should be.
- 5. Practicals shall be assessed on the basis of a written report and/or an oral presentation, on the results of the practical work carried out and/or on the basis of the practical skills demonstrated during the course. The provisions in the third paragraph shall apply mutatis mutandis.
- 6. The examiner or examiners shall provide a copy of the questions and assignments of every written examination set by him/them to the BoE.

Article 13. Assessment of examinations

- 1. Regarding all forms of examinations, the 'four eyes' principle applies. Any examination has to be reviewed at forehand by a staff member other than the appointed examiner of the study component.
- 2. Written or online tests will be assessed on the basis of pre-determined, written criteria.
- 3. The assessment method is such that the examinee will be able to find out how the result of her/his examination or practical has been arrived at.
- 4. The final grades are expressed by means of a figure between 1 and 10, rounded to the nearest half. The grade 5,5 cannot be granted as final grade. Grades between a 5,01 and 5,49 are rounded to 5,0 and grades between 5,50 and 5,99 are rounded to 6,0).
- 5. The meaning of the figures is as follows:

1 = very poor 6 = sufficient

2 = poor 7 = well above sufficient

3 = nowhere near sufficient 8 = good 4 = insufficient 9 = very good

5 = not quite sufficient 10 = outstanding

- 6. In the case of interim examinations, marks to one decimal point may be given. Assessments may also be marked in word form:
 - participated / did not participate
 - passed / failed
 - good / pass / fail
- 7. If an examination takes the form of a number of interim examinations, the examiner can decide if a minimum mark for each is required. For the examination as a whole, the average mark of all the interim examinations should meet the criteria contained in paragraph 3 and 4.
- 8. The conversion of examination results obtained abroad shall be determined on a case-by-case basis by the BoE.
- 9. The final examination (Thesis Research Project) shall be assessed as described in Article 14.
- 10. In the event that one or more components of the same examination or practical course are assessed, whether at the same time or not, by more than one examiner, the BoE shall ensure that the examiners in question carry out their assessments on the basis of the same norms. If necessary, the BoE shall assign primary responsibility to one examiner.

Article 14. Assessment of the final examination (Master's Thesis Research Project)

- 1. Master's Thesis Research Projects are always assessed by a primary and secondary examiner, both of whom are connected to one of the institutions. The secondary examiner shall be from a different research group to that of the first examiner and shall not be directly involved with the day-to-day supervision of the student. At least one of the two examiners shall be on the list of core examiners as defined by the Board of Examiners. The other examiner should at least have obtained a PhD. Further detailed procedures are given in the Thesis Research Protocol.
- 2. An IE core examiner needs to have at least an Associate professor or Assistant professor position (UD of UHD) at either Leiden University or TU Delft (in a relevant field of Industrial Ecology). In case of not having a (Associate/Assistant) professor position, an examiner needs to have a PhD. degree, obtained a BKO certificate, have at least two years of research experience in his/her profile and have a permanent position at either Leiden University or TU Delft to become an IE core examiner.
- 3. Specialisation Industrial Ecology: in case of an individual Double Degree with TU Delft, as described in Article 3.7 of the Course and Examination Regulations, at least one of the two examiners assessing the Thesis Research Project must *not* be involved in the assessment of the Thesis of the other master's programme. The examiners team for both theses cannot completely overlap.
- 4. Specialisation Circular Economy (CIRCLE): for students in this specialisation there is an exception to Article 14.1. The Master's Thesis Research Project may be assessed by a secondary examiner from one of the CIRCLE partner universities (i.e. University of Graz (Austria), Chalmers University of Technology (Sweden) and Norwegian University of Science and Technology (Norway)) as long as the primary examiner an IE core examiner. Further detailed procedures about the criteria for the secondary examiner are given in the Thesis Research Protocol.

Article 15. Exemptions

- 1. Any request for an exemption from an examination or practical should be submitted by the examinee to the BoE, via BoE-IE@cml.leidenuniv.nl. The request must include:
 - a motivation letter, stating the reasons for the exemption request;
 - documented evidence (such as a course description);
 - a recommendation of the examiner concerned.
- 2. The BoE shall, if it considers it necessary, acquaint itself with the opinions of the examiner or examiners in question and with the reasons put forward by the student before deciding whether or not to accede to the request.
- 3. A complete or partial exemption will result in no mark being assigned to the relevant subject, or part thereof instead, the word 'vrijstelling' (exemption) shall be entered onto the diploma supplement, including credits.
- 4. An exemption will not be granted on the basis of courses obtained on Bachelor's level (see Article 16. Deviations).

5. The BoE shall reach its decision within six weeks of receipt of the request, and the examinee shall be informed of the decision immediately. In case the BoE has not reached a decision within six weeks, the request is considered to be rejected. In that case, the student can submit a notice of appeal against the rejection to the Examination Appeals Board.

Article 16. Deviations from the regular programme

- 1. Any request for any deviation from the programme described in the Implementation Regulations must be submitted in writing, together with the reasons for the request, to the BoE, via BoE-IE@cml.leidenuniv.nl. The BoE shall reach its decision within twenty working days of receipt of the request.
- 2. Specialisation Circular Economy (CIRCLE): students within this specialisation study at least at two European universities and will be awarded with a double degree. Students will either study their first year (60 ECTS) or their second year (60 ECTS) at Leiden University/Delft University of Technology. The other year will be completed at one of the CIRCLE partner universities. The Board of Examiners accepts the 60 ECTS obtained at the other university and the credits will be registered in the Leiden University registration system to complete the 120 ECTS programme.

Article 17. Application for Diploma's

1. Students apply for their diploma via the Study Advisor, at least one month before graduation.

Article 18. Final Examination

- 1. Examinees shall be deemed to have passed their final examination if the BoE, taking any exemptions that have been granted into account, has determined that every component of the master's programme has been passed.
- 2. The date of the Master's degree shall be the last working day of the month in which the last component of the master's programme has been successfully completed.
- 3. Students may request the BoE to determine the result of the final examination at a time other than this audit's date; any request to this effect must be submitted by the examinee to the student administration at least thirty days before the desired examination date.

Article 19. The diploma and the supplement

- 1. As proof that the final examination has been completed successfully, the BoE shall issue a diploma.
- 2. A supplement to the diploma shall be issued stating the marks obtained by the student and the final achievement levels of the programme in question.
- 3. In the event that an examinee has shown evidence of exceptional ability before and during the final examination, this will be indicated on the degree certificate with the words 'cum laude' or 'summa cum laude', in accordance with the provisions of Course and Examination Regulations Article 4.11.

Article 20. Retention period

- 1. The examination and model answers will be retained for a period of seven years. The work carried out in the context of an examination will be retained for two years.
- 2. A student's final paper (Master's Thesis Research Report), including the assessment form, will be retained for a period of seven years.
- 3. The decisions of the Board of Examiners, together with the results of the examinations are properly recorded. Access to the registered data is restricted to persons mandated by the Board of Examiners.
- 4. The results of the examination are retained for a period of at least fifty years.

Article 21. Criteria

In deciding on guidelines, the BoE or examiner shall consider the following criteria and, in the event of any conflicting interests, shall balance the importance of any one criterion against another:

- upholding the quality and selection requirements of an examination;
- accreditation requirements, expressed in part in terms of preventing, as much as possible, students from losing time unnecessarily during their examination or preparation work;
- leniency towards students whose study progress has been delayed as a result of circumstances beyond their control.

Article 22. Right of appeal

- 1. Any formal complaint relating to the implementation of the Rules and Guidelines for examinations should be directed to the BoE of the programme in question.
- 2. Decisions taken by the BoE of the programme may be appealed to the Examination Appeals Board of Leiden University. This must be done within six weeks of the date of issue of the decision.

Article 23. Report

- 1. The Board of Examiners makes a yearly report of its activities. The Board of Examiners submits this report to the Faculty Board.
- 2. The report should in any case contain the most important decisions of the Board of Examiners, as well as a description of the manner in which the Board of Examiners has fulfilled its responsibilities with respect to ensuring the quality of examinations.

Article 24. Mandate

All the powers vested in the BoE, whether by law, the Course and Examination Regulations or these Rules and Guidelines, may be delegated to individual members or sub-committees, subject to the consent of the whole BoE.

Article 25. Amendments to these rules and guidelines

Amendments to these Rules and Regulations that apply to the current academic year will only apply to the extent that this cannot reasonably be expected to harm the interest of the students. Amendments are established by the BoE through a simple majority of votes.

Article 26. Entering into force and publication

These Rules and Guidelines are the result of the decision by the BoE and enter into force on 1 October 2021. The full text of these Rules and Guidelines will be placed on the websites of the Faculty of Science, Leiden University and the Faculty of Technology, Policy and Management, Delft University of Technology.