

**MASTER'S DEGREE PROGRAMME
TECHNICAL MEDICINE
2018-2019**

**Rules and Guidelines
of the Board of Examiners KT-TM
(RGBE)**

**Faculteit Werktuigbouwkunde, Maritieme Techniek & Technische
Materiaalwetenschappen (3mE)
van de Technische Universiteit Delft
&
Faculteit Geneeskunde (LUMC)
van de Universiteit Leiden
&
Faculteit Geneeskunde (Erasmus MC)
van de Erasmus Universiteit Rotterdam**

General

Article 1 scope of applicability

These Rules and Guidelines govern the Master's degree programme of Technical Medicine, a joint degree programme of the Delft University of Technology, the Leiden University and the Erasmus University Rotterdam, referred to below as the 'Programme'.

Article 2 definition of terms

The definitions of terms contained in Article 1.1 of the Dutch Higher Education and Research Act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*) and Article 2 of the corresponding Master's Programme Teaching and Examination Regulations, referred to below as the Master's Programme Regulations, apply.

Article 3 the Board of Examiners' working method

1. In principle the Board of Examiners meets once a month except for July or August.
2. The Board of Examiners may delegate certain clearly defined duties.
3. The chairman and/or secretary of the Board of Examiners is/are charged with looking after the day-to-day affairs of the Board of Examiners.
4. The members of the Board of Examiners decide jointly which of them shall deputise for the chairman during the chairman's absence.
5. The meetings are not public.
6. In the event that a student submits an application or complaint to the Board of Examiners that involves an examiner who is a member of the Board of Examiners, the examiner concerned will have no involvement in the handling of the application or complaint and will temporarily depart from the meeting.
7. A report will be drawn up regarding the matters discussed at meetings.
8. Every year, the Board of Examiners compiles a report on its activities in the previous academic year and sends this report to the Dean.

Article 4 decisions taken by the Board of Examiners

1. The Board of Examiners' rulings are based on a simple majority vote.
2. If the votes are equally divided the chairman of the Board of Examiners will have a casting vote unless the votes were cast by ballot.
3. If votes cast by ballot are equally divided, then a second vote by ballot will be held; if the votes are once again equally divided, the proposal being voted upon will be rejected.

Article 5 appointment of examiners, external examiners ad hoc committees

1. All examiners of the compulsory Master's programme have a University Teaching Quality (UTQ) or an exemption for the UTQ. In special cases this can be deviated from. The director of education can submit a motivated request to the Board of Examiners.
2. The Board of Examiners may appoint experts from outside the institution as examiners. This kind of appointment is for a maximum period of two years, with the option to extend this period each time by a maximum of a further two years.
3. The Board of Examiners may appoint ad hoc committees, including an assessment committee as referred to in Article 24 of the Rules and Guidelines.
4. The Board of Examiners appoints the examiners of the compulsory Master's programme. The appointed examiners are authorized for determining the examinations and the results thereof.

Article 6 standards

The Board of Examiners or the examiner uses the following standards as a guideline when making decisions and weigh the various standards against each other in the event of any inconsistency:

1. maintaining the quality and selection requirements with respect to the examination or part of the examination in question;
2. expediency, with the goal of:
 - limiting study delays of students who are making good progress in their studies,

- persuading a student to drop out of the programme with as little loss of time as possible if it has become unlikely that the programme will be completed within a reasonable period of enrolment;
3. warning students and taking appropriate action if they are in danger of taking on too great a study load;
 4. leniency with respect to a student who is experiencing or has experienced a study delay due to circumstances that are beyond the student's control.

Article 7 fraud

1. Fraud is taken to mean any act or omission by a student that makes it fully or partially impossible to properly assess the knowledge, insight and skill of that student or another student. Fraud is in any event understood to include the commission of plagiarism in any form; it should be clear that this includes all cases in which a student implies that the work in question is one's own when this is not the case, such as copying the work of others and presenting it as one's own through deliberate deception or through carelessness or inadequate references. Fraud is also defined as including among others the following:
 - being in possession, during an examination, of aids (digital or otherwise), notes, pre-programmed calculator, mobile phone, book, syllabus, notes in books for an open-book examination, the use of which has not been expressly permitted;
 - looking at the work of others during an examination or exchanging information or material inside or outside the room where the examination is taking place;
 - impersonating someone else or having someone else represent you during an examination;
 - being in possession of the questions/assignments of an examination before the date or time on which the examination is due to be held.
2. Whenever a student is suspected of having committed fraud, the matter will be dealt with by the Board of Examiners of the study programme on which the student is enrolled. If a Board of Examiners receives a complaint relating to fraud about a student who is enrolled on a different study programme, it will immediately pass on the complaint to the Board of Examiners of the relevant study programme. In the case of fraud committed in group work involving students from different study programmes, the Boards of Examiners concerned will together agree which Board of Examiners will handle the complaint. The Board of Examiners dealing with the complaint will keep the other Board or Boards informed of the outcome.
3. If fraud is discovered or suspected while an examination is being taken, the examiner or invigilator immediately informs the student in question and records the incident in writing as quickly as possible. The written report is added to the student's completed examination. The examiner or invigilator can ask 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 Board of Examiners 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 Board of Examiners immediately.
5. If it has been established that fraud has been committed, or if there is a suspicion to that effect, the Board of Examiners, the examiner, and the invigilator are authorised to obtain information from employees or parts of the organisation that could be used as evidence.
6. The Board of Examiners will give the student an opportunity to add written comments to the report that was prepared by the examiner or invigilator.
7. The Board of Examiners will, in case of fraud, make the decision that a mark will not be issued for the examination or practical in question, barring exceptional cases.
8. As well as the decision in the foregoing subsection, the Board of Examiners will decide whether a sanction will be imposed. Depending on the seriousness of the fraud, including repeated incidents of fraud, the following sanctions can be imposed on students:
 - a. a reprimand;
 - b. exclusion from the examination or practical in question for a maximum period of one year;
 - c. exclusion from one or more examination periods for a maximum period of one year;
 - d. a combination of the measures listed above.In the event of serious fraud, the Board of Examiners is entitled to decide to propose to the Executive Board that the student's enrolment on the degree programme be permanently terminated.
9. When, within the context of group learning, the Board of Examiners determines that group fraud has been committed, the Board of Examiners may impose any of the sanctions referred to in subsection 8 a. to d. upon every member of the group.
10. The Board of Examiners will not make a decision as referred to in subsection 7 until after the student has been given an opportunity to be heard (orally or written). A hearing will not be necessary if the Board of Examiners determines that no fraud has been committed.

Article 8 time limits

The Board of Examiners will render a decision with respect to a student's application within 40 working days commencing on the date on which a complete and correctly submitted application has been received.

If the application is submitted during an academic holiday or within a period of three weeks prior to an academic holiday, The Board of Examiners will render a decision within 40 working days after the end of that holiday.

The Board of Examiners may postpone making a decision for a maximum period of 10 working days. The student will be informed in writing of any postponement before the end of the period referred to in the first sentence.

Registering and withdrawing

Article 9 registering for degree audit and applying for degree certificate

1. Registration for the degree audit and the application for the degree certificate must be submitted to the Student Administration no later than 20 working days before the degree audit in question is to be held.
2. The student must submit the final study programme to the Student Administration no later than the day on which the period referred to in subsection 1 commences.
3. All requirements must be met and all results must have been submitted to the Student Administration no later than five working days before the meeting for the degree audit in question.
4. The Student Administration has the possibility of putting a student forward for the degree audit if it has established that the student has met all the obligations for the degree audit. The Student Administration will inform the student of its intention to put the student forward for the degree audit. The Student Administration will drop its intention when the student indicates within the specified period the wish to improve a result or to supplement the examination programme. In that case, the student will have the opportunity to do so the rest of the current academic year.

Article 10 withdrawal from the degree audit

1. Withdrawal from the degree audit is possible up to three working days before the meeting for the audit in question is due to be held; this is arranged with the Student Administration.
2. Any student who has withdrawn from the degree audit should re-register on a subsequent occasion, in accordance with the provisions of Article 9.

Examinations and practicals

Article 11 administering examinations

1. When the same examination is administered by more than one examiner, simultaneously or otherwise, and the results of the examination in question are also assessed by more than one examiner, the final assessment will be made on the basis of the relevant (and identical) predetermined standards in accordance with the provisions of Article 15 subsection 2. If applicable, the Board of Examiners will designate an examiner who will have primary responsibility for administering the examination.
2. In special cases the Board of Examiners may allow a student to take an examination in a form other than a written examination. The request for this must be substantiated.
3. An oral examination will be conducted by the examiner and another scientific employee.
4. A student's registration will be confirmed by or on behalf of the Board of Examiners during written or oral examinations.
5. In exceptional cases, the Board of Examiners may permit more than two opportunities in a year for certain examinations. A motivated request can be submitted by the student.
6. In the event of irregularities, the Board of Examiners can declare the results of the relevant examination invalid for all students participating in the exam.

Article 12 expired

Article 13 questions and assignments

1. The questions and assignments contained in an examination are a well-balanced representation of the materials studied.
2. The examination reflects the learning objectives in terms of level, content and form.
3. The questions and assignments are clear and unambiguous. The method of assessment has to be made clear and unambiguous so that the student is fully aware of how extensive and detailed the answers must be.
4. Well before a written examination, the examiner gives the students the opportunity to familiarise themselves with examples of representative examination questions and answers and the examination assessment standards.
5. The content of the examinations is such that the student will have sufficient time to answer the questions, based on reasonable standards.

Article 14 order during examinations

1. The examiner ensures that invigilators are designated for written examinations. The invigilators maintain order during the exams and ensure that they run smoothly, on behalf of and under the responsibility of the Board of Examiners. The invigilators observe the 'Rule of procedure for assessments'.
2. The following applies regarding entering an examination room:
 - a. only students with a valid identity document may gain access to the examination. Acceptable identity documents are a campus card, passport, identity card, or driving licence, and
 - b. students may only gain access to the examination if they have a valid examination ticket or if they appear on the list of examinees.
3. At the request of or on behalf of the Board of Examiners the student will be required to identify oneself using the student ID or other valid proof of identity (a passport, ID card or driving licence).
4. The student must follow the instructions issued by the Board of Examiners, the examiner or the invigilator that have been published before the start of the examination and the instructions that are given during the examination or immediately after it has ended.
5. A student who does not comply with the provisions contained in or pursuant to subsections 3 and 4 may be excluded from further participation by the Board of Examiners or the examiner. In these cases no mark will be recorded for the examination.
6. Examination paper and scrap paper will be provided. The student immediately writes down his/her name on all papers. The student must bring his/her own writing and drawing materials. Only work written on examination paper or answer sheets will be graded. A student may only use the examination and scrap paper provided during the exam.
7. During an examination the student may not use any pre-programmed calculators, computers, mobile telephones or other devices that have comparable functions unless the examiner has decided otherwise.¹
8. If the use of a calculator or other aid is permitted during an examination, the student must bring his/her own calculator or aid, which must be in compliance with the function limits determined by the Board of Examiners. The only calculators permitted are the Casio Fx82MS, the Texas Instruments TI-30-XB and the Texas Instruments TI-30-XS. The examiner may deviate from this, provided the deviation is announced in time before the examination.
9. During an examination the student may not have in one's possession nor may consult any books, lecture notes, other notes or other documents unless the examiner has decided otherwise.
10. Answers may not be written in pencil unless the examiner has given permission to do so in advance.
11. The examination assignments may not be taken by the student after the examination has ended unless the examiner has decided otherwise.
12. Students who wish to participate in an examination more than 30 minutes after the examination in question has started will not be admitted.
13. The student is not permitted to leave the location where the examination is being held within 30 minutes after an examination officially starts. In urgent cases, permission may be given to leave the location where the examination is being held after those 30 minutes have passed, under the supervision of an invigilator. No more than one student may be absent at any given time.
14. Before the student's final departure from the location where the examination is being held (not earlier than 30 minutes after the examination in question has started) the student must hand in the examination work, with name and student number noted on each page, to the examiner or invigilator.

Article 15 assessment

1. The assessment method, including the weighing of components, has to be clear such that the student can ascertain how the result was reached.
2. Written examinations will be assessed, with due observance of the provisions contained in Article 11 subsection 1, on the basis of model answers and standards that have been laid down in writing in advance and that may be revised during correction.
3. A result will be indicated by a mark, a V (*voldaan* - pass), an O (*onvoldoende* - fail) or a VR (*vrijstelling* - exemption).
4. A final mark for a subject will be expressed as whole mark, or a half mark in the range from 1.0 to 10.0. The meaning of the marks is as follows:
 - 9.5 – 10.0 Excellent
 - 8.5 – 9.0 Very good
 - 7.5 – 8.0 Good
 - 6.5 – 7.0 More than satisfactory
 - 6.0 Satisfactory
 - 4.5 – 5.5 Nearly satisfactory
 - 3.5 – 4.0 Unsatisfactory
 - 1.0 – 3.0 Very poor
5. When case that the marks are rounded off to whole or half integers, then three-tenths, four-tenths, eight-tenths and nine-tenths are rounded up and one-tenth, two-tenths, six-tenths and seven-tenths are rounded down.
6. If a subject consists of more than one component, the subject overview in the study guide indicates how the final mark will be determined. The following provisions apply in this respect:
 - The mark for a component of the examination will be expressed in tenths, where hundredths greater or equal to 0.05 will be rounded up and hundredths lower than 0.05 will be rounded down.
 - The result for a component examination or practical may be included in the determination of the final mark only if the result for the component examination is at least 5.0 or a V (*voldaan*). A final mark cannot be calculated if the result of one or more component examinations are lower than the set lower threshold of 5.0 or a V (*voldaan*).
7. Final marks that are earned in another degree programme at this or another Dutch university will be adopted as they have been given, as a whole or half integer or in tenths. The definition that the other degree programme attributes to those marks will also be adopted.
8. The provisions of Article 28 apply to final marks that are earned abroad.
9. If more than one result is earned for a subject, the highest result that has been earned will apply during the degree audit.

Article 16 registering results

1. The examiner records the results of an examination in OSIRIS, including the date on which the examination was held or, in the case of a practical exercise, the date on which the exercise was completed.
2. The examiner may determine the latest date by which a practical exercise must be completed, such as the date on which a report must be handed in. This information must be included in the relevant subject overview in the study guide.

Article 17 official date of completed exams and practicals

1. The official date of an exam is the date on which the written or oral exam was taken.
2. The date of a practical is the date on which the final report is submitted or the oral final presentation is held. If there is no report or final presentation, the official date is the date on which the practical ends.

Article 18 retention of work and results

1. Due to the possibility of appeals proceedings, student work that has been assessed, with the exception of three-dimensional projects, must be retained for at least two years after the date of the exam. Three-dimensional projects must be retained by the examiner for at least six weeks after the results have been published.
2. By way of derogation of section 1, and in connection with the re-accreditation of the degree programme, in contravention to subsection 1, successfully completed Master's theses and the related evaluation forms must be retained for at least seven years. The department is responsible for retaining the theses and evaluation forms.
3. In the event that no result has been published, the period referred to in subsection 1 will commence on the date on which the exam is held.
4. The results of exams will be retained by the Student Administration for a period of at least 10 years.

Exemption

Article 19 exemption

An application for an exemption for all or part of a course must be submitted to the Board of Examiners in writing, stating the reasons for the exemption request, together with any documentary evidence. The student must attach the recommendation of the examiner concerned to his/her application.

Article 20 official date of an exemption

The official date of an exemption will be the date on which the Board of Examiners grants the exemption.

Further rules governing internships and projects

Article 21 internships

1. Internships are graded by V (pass) or O (fail). The grade does not count for the weighted average.
2. The internship is carried out in a clinical department of which the technological signature corresponds to one of the two specialisations of the master's degree programme.
3. The subject for the master's thesis project carried out during the internship will be judged by the master's programme director, together with the track coordinator and clinical professor(s).
4. The master's thesis report is written in English and includes an English and a Dutch summary.
5. The defence of the master thesis is in English.

Article 22 official date of internship and project results

1. The official date of the completion of the internship is the date on which the final report is received.
2. The official date of the completion of a project is the date on which the final report or project is submitted or the date on which the oral final presentation is given.

Further rules governing Master's Thesis Project

Article 23 Master's Thesis Project

1. The master's thesis project always is the final component of the master's programme. A student can only be admitted to the master's thesis project if at least 114 EC of the first two years of the master have been completed.
2. The graduation ceremony cannot find place if not all components, except the master's thesis project, have been completed with results that meet the requirements of Article 29 of these Rules and Guidelines.
3. The master's thesis project of the individual double degree master is a combination of both masters, for which the student writes 2 separate theses or distinguishes separate sections in the thesis.

Article 24 composition of the assessment committee for Master's Thesis Project

1. The board of examiners appoints a Master Assessment Committee for each Master's thesis project.
2. The Master Assessment Committee consists of at least three members:
 - a. The chairman of the committee is a full professor or an associate professor with ius promovendi.* The chairman is employed by the Delft University of Technology, Leiden University or Erasmus University Rotterdam.
 - b. Each of the three members is a scientific staff member (full professor, associate professor or assistant professor) of the Delft University of Technology, Leiden University and/or Erasmus University Rotterdam.
 - c. At least one member is a medical staff member with a doctoral degree of the hospital where the student carried out the clinical specialisation internship and has been responsible for the medically-oriented content of the master thesis project.
 - d. At least one member is a scientific staff member with a doctoral degree and has been responsible for the technically-oriented content of the master thesis project.
 - e. At least one member is a scientific staff member (full professor, associate professor or assistant professor) of a different department of the Delft University of Technology, Leiden University or Erasmus University Rotterdam and has not been involved in the master's thesis project. This member sees to it that the level of the mark is in accordance with the marks of other sections/universities. In double-degree master-programmes, this member can belong to the scientific staff of one of the collaborating universities;**

- f. The committee can be complimented with experts from outside the university and/or with other scientific employees.
3. If the student, when registering for the degree audit, qualifies for the designation 'Cum Laude', an extra member shall be added to the Master Assessment Committee. The extra member is a scientific staff member (HGL, UHD, UD) of a different department of the Delft University of Technology, Leiden University or Erasmus University Rotterdam and has not been involved in the master's thesis project.**
4. In exceptional cases, the Board of Examiners may deviate from this article.

*As an alternative, the professor's department head can, in advance, propose a scientific staff member (associate professor or assistant professor) to act as chairman of Master Assessment Committees. To be eligible to act as chairman the department head must submit a motivation letter to the Board of Examiners from which the qualifications of the staff member become evident. The Board of Examiners evaluates the motivation letter and informs the department head about the decision (in writing). Once approved by the Board of Examiners, the scientific staff member is qualified to act as chairman also in future Master Assessment Committees.

**The department head can, in advance, propose a lecturer (docent), employed by his department, to act as this member. To be eligible the department head must submit a motivation letter to the Board of Examiners from which the qualifications of the lecturer become evident. The Board of Examiners evaluates the motivation letter and informs the department head about the decision (in writing). Once approved by the Board of Examiners, the lecturer is qualified to act as member also in future Master Assessment Committees.

Article 25 working method of the assessment committee

The Master Assessment Committee assesses the Master Thesis Project on the basis of the Master Thesis (MEP) Grading Scheme.

Article 26 official date of the Master's Thesis Project results

The official date of completion of the Master's Thesis Project will be the date on which the final oral presentation and defence are given.

Curriculum components completed elsewhere

Article 27 inclusion in the degree audit programme

1. The number of credits to be submitted for the degree audit and that are derived from curriculum components completed outside the degree programme may not exceed a total of 30 EC.
2. Courses successfully completed elsewhere will be only be included in the TM programme if they were completed during the period in which the student was enrolled on the TM degree programme.

Article 28 provision of information

1. In the event that a student has completed approved components taken outside the degree programme, the student is responsible for ensuring that the authorised agency issues a statement indicating the component in question by name and insofar as applicable by subject code, the associated study load (credits), the results, the date on which the results were earned and the date on which the statement was issued.
2. In the case of components taken abroad, the student must request the Board of Examiners to determine the number of credits and the result.
3. The results will be dated according to Article 17 of these Rules and Guidelines. If the statement of subsection 1 does not mention the exact date when the examination has been taken, the result will be dated on the last calendar day of the month in which the examination has been taken according to the statement.

Pass/fail rules

Article 29 pass/fail rules governing Master's degree audit

1. The student meets the requirements for the degree audit once the following have been met:
 - a. a result has been earned for all subjects: a mark, a pass (v) or an exemption (vr);
 - b. none of the marks may be lower than 6.0.
2. The method of assessment will be transparent so that the student can ascertain how the result was reached.

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3. In special cases the Board of Examiners may deviate from the provisions of subsection 1. It will stipulate additional requirements if necessary.

Article 30 pass/fail rules governing the Honours Programme Master

The student meets the requirements for the Honours Programme Master once the following have been met:

1. A pass mark has been achieved for all subjects in the Honours Programme Master.
2. Gaining the minimum number of credits for the Honours Programme Master.
3. The duration of study for the Master's degree programme and the Honours Programme Master from which any delay in studies due to circumstances beyond the student's control has been subtracted is a maximum of two years. In exceptional circumstances, the Board of Examiners can deviate from this time period in favour of the student.

Conferring the predicate 'cum laude'

Article 31 the designation 'cum laude' for Master's degree audits

1. A student can receive the designation 'cum laude' for the Master's degree audit if the Board of Examiners decides to grant this distinction and the following requirements have been met:
 - a. the weighted average of the results of the courses not including the Master's Thesis Project is at least 8.0; passes (v) and exemptions (vr) will not be taken into consideration;
 - b. the number of credits for the courses for which a pass (v) has been earned or for which an exemption (vr) has been granted may not exceed 20 credits in total.
 - c. The result for the Master's Thesis Project is at least 9.0.
 - d. The duration of the master does not exceed 36 months, starting from the date of subscription in the master programme. Study delay acknowledged as part of the Graduation Support Scheme (RAS) or TU Delft Profiling Fund Regulations can be taken into account.
 - e. The student has taken each exam of his/her master programme not more than once.
2. In special cases the Board of Examiners may decide to grant the predicate 'cum laude' to a student who does not meet the requirements referred to in subsection 1 if the student in question has shown exceptional skills in the degree programme in question.

Degree certificates and results achieved

Article 32 degree certificate, transcript and supplement

1. A degree certificate will be issued by or on behalf of the Board of Examiners as evidence that the degree audit has been completed.
2. A supplement in English will be provided when the degree certificate is issued, which will in any event indicate the results achieved. A supplement in Dutch can be obtained from the Student Administration on request.
3. The supplement will be provided after the student has uploaded the Master Thesis in the TU Delft Repository. If the thesis is confidential, an embargo with a maximum of 5 years can be attached or a public version can be uploaded.

Article 33 statement of results achieved

1. A student who has successfully taken one or more exams and to whom the degree certificate within the meaning of Article 32 cannot be issued when the student leaves the university will receive a statement from the Board of Examiners upon request. That statement will indicate the student's personal data, subject code(s), subject name(s), number of credits, the result(s) and the date(s) on which the result(s) was/were earned.
2. A statement as referred to in subsection 1 must be requested from the Student Administration.

Appeal and final provisions

Article 34 appeals against decisions made by the Board of Examiners

An appeal may be brought against a decision made by the Board of Examiners and/or an examiner within a period of six weeks after the person in question has been notified of the decision. Appeals may be brought before the Examination Appeals Board for the exams referred to in Article 7.60 of the Higher Education and Research Act. The Board of Examiners will refer to this possibility of appeal in its decision.

Article 35 amendments to the Rules and Guidelines of the Board of Examiners

No amendments may be made to these Rules and Guidelines that apply to the current academic year unless the students' interests remain reasonably unaffected.

Article 36 unexpected circumstances

Insofar as these Rules and Guidelines do not provide for specific circumstances, the Board of Examiners will make a decision that is in line with these Rules and Guidelines to every extent possible.

Article 37 entry into force

These Rules and Guidelines will enter into force on 1 September 2018.

Adopted by the Board of Examiners on 31 August 2018.