

TEACHING AND EXAMINATION REGULATIONS

**(see Article 7.13 of the Higher Education and
Research Act)**

**MASTER'S DEGREE PROGRAMME
LIFE SCIENCE & TECHNOLOGY**

2014 - 2015

DELFT UNIVERSITY OF TECHNOLOGY

Most important changes in comparison with the teaching and examination regulations master Life Science & Technology 2013-2014

Numbering of articles is adapted to the teaching and examination regulations documents of the bachelor programs.	(changed, TU wide proposal)
Article 6 - Completion of bridging programme	(added, TU wide proposal) The bridging programme must be completed within 2 years.
Article 11 - Honours programme	(changed) Implementation, added. References to the Implementation Regulations removed.
Article 12-14 – Registering and withdrawal for examinations and practicals.	(added, TU wide proposal)
Article 16.2 - Sequence of examinations	(removed, TU wide proposal) Hardship clause for doing master exams before completing the bachelor programme no longer applicable.
Article 19.2 – Oral examinations	(removed, TU wide proposal) Second examiner is mentioned in Rules and Regulations of the board of examiners
Article 20 - Determining and announcing the results	(changed) Results of all exams (not only written exams) must be determined within 15 working days.

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Section 1 - General

Article 1 – Areas to which the regulations apply

1. These regulations apply to the teaching and the examinations related to the Master's degree programme in Life Science and Technology, hereafter to be referred to as the programme.
2. The teaching and organisation of the programme is the responsibility of the Faculty of Applied Sciences at Delft University of Technology, hereafter to be referred to as the faculty.
3. The programme is governed by Implementation Regulations which constitute part of these Teaching and Examination Regulations.

Article 2 – Definitions of terms used

The terms used in these regulations should be interpreted as meaning the same as in the Higher Education and Scientific Research Act, insofar as they are defined in that Act.

The following terms are to be defined thus:

- a. the Act: the Higher Education and Scientific Research Act (in Dutch, the Whw), in the Dutch Bulletin of Acts, Orders and Decrees, number 593 and as amended since;
- b. the programme: the Master's degree programme as denoted in Article 7.3a paragraph 1, subparagraph b of the Act;
- c. student: anyone enrolled at Delft University of Technology as a student or extraneous student for the purpose of benefiting from education and/or for the purpose of sitting the examinations and undergoing the degree audit which form part of the programme;
- d. cohort: the group of students who have registered for a degree programme for the first time in a given academic year;
- e. teaching period: half a semester;
- f. subject: a teaching unit within the programme as intended in Article 7.3, paragraphs 2 and 3 of the Act; a subject can consist of a number of components;
- g. practical: a practical exercise, as a subject or as part of a subject, as intended in Article 7.13, paragraph 2, subparagraph d of the Act, taking one of the following forms:
 - writing a thesis;
 - conducting a project or experimental design;
 - completing a design or research assignment;
 - conducting a literature review;
 - completing an internship;
 - participating in fieldwork or an excursion;
 - conducting tests and experiments;
 - participating in other educational activities aimed at enabling participants to attain certain skills.
- h. examination: an assessment of the knowledge, insight and skills of a student in relation to a subject, as well as the marking of that assessment by at least one examiner, appointed for that purpose by the Board of Examiners;

- i. component examination: an assessment of the knowledge, insight and skills of a student in relation to a component within a subject, as well as the marking of that assessment by at least one examiner, appointed for that purpose by the Board of Examiners;
- j. degree audit: an assessment by which the board of examiners, in accordance with Article 7.10 of the Act, establishes whether all examinations in the various subjects that constitute the programme have been successfully completed;
- k. Board of Examiners: the programme's Board of Examiners, which has been installed in accordance with Article 7.12 of the Act;
- l. examiner: the individual who, in line with Article 7.12c of the Act, has been appointed to set the examinations;
- m. Implementation Regulations: the Implementation Regulations which form part of these Teaching and Examination Regulations;
- n. credit: a credit awarded in line with the European Credit Transfer System (ECTS); one credit denotes a study load of 28 hours;
- o. working day: Monday to Friday with the exception of recognised national public holidays;
- p. study guide: the digital guide to the programme containing specific information pertaining to the various subjects (www.studyguide.tudelft.nl);
- q. institute: Delft University of Technology;
- r. Blackboard
s. Osiris: the electronic system designed for the exchanging of teaching information;
the electronic system designed for the exchanging of student information;
- t. disability: all conditions which are (at least for the period in question) chronic or lasting in nature and which form a structural limitation for the student in receiving education and/or sitting examinations or taking part in practicals.

Article 3 – The programme objective

The programme aims to educate students to become a Master of Science in Life Science and Technology, whereby the final attainment levels described in Article 4 must be achieved.

Article 4 – The programme's final attainment levels

Master's graduates will:

1. *be capable of being analytical in their work, on the basis of a broad and deep scientific knowledge;*
2. *be able to synthesise knowledge and to solve problems in a creative way when dealing with complex issues;*
3. *have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative, in complex and unpredictable professional environments;*
4. *be able to assume leading roles, including management roles, in companies and research organisations, and be able to contribute to innovation;*
5. *be able to work in an international environment, helped by their social and cultural sensitivity and language and communication abilities, partly acquired through experience of team work and any study periods abroad;*
6. *have an awareness of possible ethical, social, environmental, aesthetic and economic implications of their work and the insight to act accordingly;*
7. *have an awareness of the need to update their knowledge and skills.*

In addition, Master's graduates should possess the following kinds of competence:

1. *required core knowledge and understanding in their field of study;*
2. *knowledge of methods and technical practice in their field of study;*
3. *training in theoretical knowledge and methods, including modelling;*
4. *advanced knowledge of specific areas in their field of study;*
5. *specific attitude and way of thinking expected in a particular subject;*
6. *awareness of connections with other disciplines and ability to engage in interdisciplinary work.*

Article 5 – Admission to the programme

1. All students possessing a certificate proving that they have successfully completed their Bachelor of Science studies in Life Science & Technology or equivalent will be admitted to the programme.
2. Students who do not possess the degree mentioned in paragraph 1 are required to obtain proof of admission to the programme from the dean, who will seek the advice of the admissions officer on this matter. The assessment subjects are described in article 3 of the Implementation Regulations of the Master's degree programme Life Science & Technology.
3. In order to obtain proof of admission, the student must meet or, as the case may be, possess:
 - a. the general relevant criteria set by the executive board, laid down in Part 1.2 "Entrance and admission" (central part) and appendix 1 "Policy on fees and enrolment" of the Student Charter
 - b. a certificate, together with the accompanying list of marks, proving that he/she possesses knowledge of a sufficiently high level and broad scope to successfully complete the master programme within the allotted period.
4. Students in possession of
 - a. a Bachelor's diploma from a foreign university can only be admitted to the programme provided that he/she has a minimum Grade Point Average of 75% of the maximum number of credits available. Proof of English language proficiency is another admission criterium.
 - b. a Bachelor of Engineering degree in Life Science & Technology (HBO) or equivalent will be admitted to the programme, with a bridging programme to be determined by the admission officer.
 - c. Students with a Bachelor of Engineering degree (HBO) can be admitted to the a bridging programme provided he/she has a minimum Grade Point Average of 75% and no delay of study (guideline). Before starting the Bridging Programme, students should have passed the entrance exams for Mathematics and English.

Article 6 – Completion of bridging programme prior to the degree programme

1. A student who is enrolled on a Bachelor's degree programme with the aim of following a bridging programme prior to the degree programme must complete this bridging programme within one academic year, or within the period of study that has been agreed with the student by the Bachelor's degree programme, extended by twelve months.
2. In the case that the student fails to complete the bridging programme within the specified period, his enrolment will be cancelled as of the first day of the month following the month in which the student would have had to complete the bridging programme. The exclusion from the bridging programme and from the Bachelor's programme applies to the four academic years subsequent to the academic year in which the enrolment is cancelled.

Article 7 - Intentionally skipped

Article 8 – Taking the programme on a full-time or part-time basis

This programme is taught only on a full-time basis.

Article 9– Language

1. Classes are taught and examinations and degree audits take place in English.
2. Notwithstanding the provisions of paragraph 1, the dean can give permission for classes to be taught in Dutch if the particular nature of the subject, the organisation, the quality of the education or the origin of the students gives cause for this.
3. Should a student request permission to complete one or more parts of the examination or the degree audit in a language other than English, this will be subject to the stipulations of the board of examiners in this regard, as laid down in the Rules and Guidelines of the board of examiners.

Section 2 - Composition of the study programme and the degree audit

Article 10 – Composition of the study programme and the degree audit

1. The composition of the study programme and the relevant transitional regulations are laid down in the Implementation Regulations. Teaching will be provided as described in the study guide.
2. The Master's degree audit forms part of the programme. The programme has a total study load of 120 credits. When a student follows two Master's degree programmes at TU Delft at the same time, he must obtain at least 60 extra unique credits besides a complete Master's degree programme of 120 credits.
3. It is not permitted for any subject in the study programme to have been part of the Bachelor's degree programme on the basis of which the student was admitted to the programme. If a compulsory subject in the study programme was already completed in the aforementioned Bachelor's degree programme, the board of examiners will designate an alternative subject in its place. If an elective subject in the study programme was already completed in the aforementioned Bachelor's degree programme the student will choose an alternative elective subject.

Section 3 – Honours Programme

Article 11 – Honours programme

1. Students who scored a GPA of 75% or better for the courses of the first MSc semester will be invited to register for the TU Delft Honours programme for outstanding Master's students.
2. Based on the criteria: a GPA of 75% or better for the courses of the first MSc semester and the students' proposed programme and motivation, students can be admitted to the Honours programme by the director of studies or the faculty Honours coordinator
3. The Honours programme will comprise at least 20 credits:
 - a. 5 credits must be completed in the TU Delft-wide component of the Honours programme, which consists of the following parts:
 - the subject "Critical Reflection on Technology"
 - playing an active role within the Honours community
 - b. The remaining credits may be completed in the faculty or individual component of the Honours programme, the composition of which (including its content and options) is described in the Implementation Regulations.
4. Any student willing to participate in the Honours programme must submit his or her options and motivation for the faculty component to the faculty honours coordinator and for the individual component to the director of studies for approval.
5. The Board of Examiners will be responsible for assessing whether all the requirements of the Honours programme have been met.

6. A student who successfully completed the Honours programme as laid down in art. 32A of the Rules and Guidelines of the Board of Examiners, will be awarded a certificate signed by the chair of the Board of Examiners and the Rector Magnificus.

Section 4 – Registering and withdrawing

Article 12 - Registering for examinations

1. Registration to take part in an examination is done by entering the required data into the examination registration system no later than 14 calendar days (that is, not *working* days) before the examination.
2. Students may submit a request to register for an examination after the deadline mentioned in paragraph 1 has passed but no later than two working days before the examination in question, at the central examination desk. The request will be honoured providing that places are available at the time of registration in the room or rooms where the examination is scheduled to take place. The student will be informed one working day before the examination takes place.
3. In the case of circumstances beyond a student's control, whereby the student is unable to register for the examination, the Board of Examiners can still permit the student to participate in the examination.
4. The following applies upon entering the examination room:
 - a. only students with valid proof of identity will be admitted to the examination. The following will be accepted as proof of identity: campus card, passport, identity card or driving licence.
and
 - b. students will only be admitted to the examination with a valid examination ticket and/or if they are included in the list of participants.
5. If a student has participated in an examination without a valid examination ticket, the examination work will be considered invalid, will not be evaluated and does not lead to a result.
6. The student can submit a substantiated request to the Board of Examiners to have examination work that is considered to be invalid to be declared valid and to have it evaluated.

Article 13 - Registering for practicals

1. Registration for practicals will take place in the manner and by the deadline indicated in the study guide or on Blackboard for the practical in question.
2. In special cases the Board of Examiners may deviate from the period of registration referred to in paragraph 1, however only in favour of the student.
3. Students who do not register for a practical on time may not participate in that practical. In exceptional circumstances the Board of Examiners may allow the student to participate in the practical.
4. If a student participates in a practical for which the student was not properly registered, the Board of Examiners may declare the results of the practical to be invalid.

Article 14 - Withdrawal or absence

1. It will be possible to withdraw from an examination via the examination registration system up to 3 working days before the examination takes place.
2. A student willing to participate in a subsequent occasion, should re-register, in accordance with the provisions of Article 12.

Section 5 - Examinations

Article 15 – Number, times and frequency of examinations

1. The opportunity to sit the course examinations is offered twice per academic year:
 - the first opportunity is in or immediately after the teaching period for the subject to which the exam in question relates.
 - The second opportunity is before the start of the new academic year.
 - Prior to a third (or subsequent) course examination attempt the instructor is allowed to oblige the student to consult the instructor in order to obtain educational advice and help for thorough preparation.
 - The foregoing subsections also apply to practicals, provided that this may reasonably be expected from the programme. The Board of Examiners may, in accordance with paragraph 5, decide on this.
2. The frequency of examinations is laid down in the Implementation Regulations. A timetable of all the opportunities for sitting written examinations is drawn up on an annual basis and distributed before the start of the academic year.
3. If there is no indication as to the number of times a particular examination can be taken in any one academic year because it relates to a subject not taught by the programme itself, the relevant stipulations in the Teaching and Examination Regulations of the other programme will apply. The Board of Examiners reserves the right to make decisions that deviate from the norm regarding this matter.
4. Notwithstanding the provisions of paragraph 1, there will be at least one opportunity in a year to sit examinations relating to subjects not taught in a given academic year.
5. In exceptional cases, the Board of Examiners may permit a deviation from the standard number of times that certain examinations can be taken.

Article 16 – Sequence of examinations

The sequence in which students are required to sit examinations and participate in practicals is laid down in the Implementation Regulations.

Article 17 – Validity of examinations

1. The result of an examination is valid for an unlimited period. However, in cases where the examination result dates from over four years ago, the Board of Examiners may impose an additional or substitute examination.
2. The terms of paragraph 1 likewise apply to component examinations provided that the results are administered in Osiris, unless the validity of the component examination is linked to a period of time mentioned in the study guide.

Article 18 – The form of examination and method of assessment

1. Examinations are set as described in the the [studyguide](http://www.studyguide.tudelft.nl) (www.studyguide.tudelft.nl).
2. If there is no indication as to the way an examination is to be set because it relates to a subject not taught by the programme itself, the relevant stipulations in the Teaching and Examination Regulations or the studyguide of the other programme will apply.
3. The board of examiners may, if it so wishes, deviate from the provisions of paragraphs 1 and 2, in favour of the student.

Article 19 – Oral examinations

1. Only one student at a time will sit an oral examination, unless the examiner in question specifies otherwise.
2. Oral examinations will be held in public, unless determined otherwise by the Board of Examiners in a special case or unless the student has formally objected to the public nature of the examination. Public means that both the student and the examiner agree to invite an observer with the aim to guarantee the objectivity of the examination
3. Prior to an oral examination, the examiner must ask the student to provide proof of identity.

Article 20 – Determining and announcing the results

1. The examiner is required to supply the student with a written statement of the result of an oral examination.
2. The examiner is required to determine the result as soon as possible after the examination but within 15 working days at most. The examiner forwards the necessary details to the student administration. Taking due account of the student's right to privacy, the student administration then ensures that the results are registered and published within 20 working days of the examination date. If the examiner is not able to meet these requirements due to exceptional circumstances, he or she must inform the board of examiners, stating the reasons for the delay and must inform the students as soon as possible
3. In cases where the period referred to in subsection 2 is not feasible, the Board of Examiners will determine beforehand precisely how and within what period of time the student will be notified of the results.
4. When receiving the result of an examination, the student will be made aware of his or her right to inspect the results as referred to in Article 21, as well as the opportunity to lodge an appeal with the Examination Appeals Board.

Article 21 – The right to inspect the results

1. For a period of at least 20 working days after notification of the results of an examination, the student has the right to inspect his or her marked work, on request. If a student intends to lodge an appeal regarding the marking of his or her work, he or she will be supplied with a copy of the marked work.
2. During the period referred to in paragraph 1, all interested individuals may acquaint themselves with the questions and assignments set in the examination, as well as with the criteria used for marking.
3. The board of examiners may determine that the right to inspection or perusal referred to in paragraphs 1 and 2 will take place at a location specified beforehand and at no less than two specific times, also decided on beforehand. If the student can prove that he/she is or was unable to be present at the location at the set time due to circumstances beyond his or her control, then another opportunity will be provided, if possible within the period stated in paragraph 1. The location and times mentioned in the first sentence will be announced well in advance.

Article 22 – Discussing the examination results

1. As soon as possible after the results of an oral examination have been announced, an opportunity can be arranged for the examiner to discuss the results with the student, either at the student's request or at the instigation of the examiner. At this meeting, the reasons behind the marks awarded will be explained.

2. For a period of 20 working days after the results have been announced, students who have taken a written examination may submit a request to discuss the results with the relevant examiner. The discussion will take place within a reasonable time span and at a place and time determined by the examiner.
3. In cases where a collective discussion is organised by or on the instructions of the Board of Examiners, a student may only submit a request, as described in the preceding paragraph, if he/she was present at the collective discussion and if he/she provides a good reason for the request or if, due to circumstances beyond his/her control, he/she was unable to attend the collective discussion.
4. The provisions of paragraph 3 are similarly applicable if either the Board of Examiners or the examiner first gives the student the opportunity to compare his/her answers with model answers.
5. The Board of Examiners may permit departures from the provisions of paragraphs 2 and 3.

Section 6 - Studying with a disability

Article 23 – Adaptations to help students with a disability

1. Students who have a physical or sensory disability are entitled to adaptations in teaching, examinations and practicals, on written request. These changes will be geared as much as possible to a student's individual needs, but they must not affect the quality or the degree of difficulty of a subject or an examination programme. The facilities provided to this end may involve adapting the form or duration of examinations and/or practicals to the student's individual situation or making practical aids available.
2. The request referred to in paragraph 1 should be accompanied by a recent medical certificate from a doctor or a psychologist. If there is evidence of dyslexia, the request should be accompanied by a document issued by a recognised dyslexia-testing bureau (i.e. registered with BIG, NIB, or NVO). If possible, this certificate should also estimate the extent to which the disability forms an obstacle to study progress.
3. Requests for the adaptation of teaching facilities will be decided upon by the dean or by the director of studies acting on the dean's behalf. The board of examiners will decide on requests for adaptations to examinations.
4. Alternative assessment methods and options for adjustments to educational facilities are given in appendix 1 to this Teaching & Examination Regulations.

Section 7 - Exemptions

Article 24 – Exemption from examinations or practicals

After having been advised by the relevant examiner, the board of examiners may decide to exempt students from an examination or practical on the grounds of:

- a. an examination, degree audit or practical completed within the Dutch higher education system or elsewhere which, as regards content and study load, corresponds with the subject for which exemption is sought, or
- b. knowledge and/or skills acquired outside the higher education system.

Section 8 - Degree audit

Article 25 – The times and frequency of the degree audit

At least 10 times a year there is an opportunity to undergo the Master's degree audit. The dates set by the Board of Examiners are published before the start of the academic year.

Art 26 - Intentionally skipped

Art 27 - Intentionally skipped

Section 9 - Study progress checks

Article 28 – Study progress checks

The student administration is responsible for ensuring that each student is able to see and check his/her own results via Osiris.

Section 10 - Contravention, changes and implementation

Article 29 – Contravening the regulations

If the studyguide and/or any other regulations relating to the study programme and/or the examination programme prove to contravene these Teaching and Examination Regulations and the accompanying Implementation Regulations, precedence will be given to the provisions of these Teaching and Examination Regulations in combination with the Implementation Regulations.

Article 30 – Changes to the regulations

1. Any changes made to these regulations will be made by special resolution of the dean.
2. No changes made will affect the current academic year unless it is reasonable to suppose that the interests of students will not be adversely affected.
3. None of the changes may, to the detriment of the student, influence any decisions concerning a student that are made by the board of examiners on the basis of these regulations.

Article 31 – Transitional regulations

1. If the composition of the study programme undergoes intrinsic changes or if these regulations are amended, the dean will draw up transitional regulations that will be incorporated into the Implementation Regulations.
2. Such transitional regulations are required to include:
 - a. a provision concerning the exemptions that can be given on the basis of the examinations already passed;
 - b. a provision specifying the period of validity of the transitional regulations.
3. If a subject is removed from the study programme, four opportunities to sit an examination in this subject will be granted after the last classes have been taught: an examination following on from the classes, a resit in the same academic year, and two resits in the subsequent academic year.

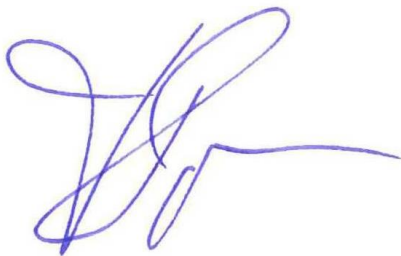
Article 32 – Publication of the regulations

1. The dean is responsible for finding a suitable way of publicising these regulations and the relevant Implementation Regulations, as well as any changes to the regulations.
2. The Teaching and Examination Regulations, together with the accompanying Implementation Regulations, will always be published on the programme's website.

Article 33 – Entry into force

This ruling will come into effect on 1 September 2014

Drawn up by the Dean of the faculty of Applied Sciences 3 July 2014

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.

Prof.dr.ir. T.H.J.J. van der Hagen
Dean Faculty of Applied Sciences

Appendix 1 to Article 23 of these Teaching & Examination regulations:

Adjustments to the assessment procedure, including examinations and other forms of assessment, may concern the following matters, among others:

- the content (offering alternative but equivalent subject material);
- the course material (making available course material that is more easily accessible, for example);
- the form of assessment (e.g. replacing a written examination by an oral one, or vice versa, testing knowledge of the studied material by way of interim examinations, or granting an exemption from attendance);
- time-related matters (such as granting more time during examinations, spreading out examinations over the examination period, granting exemptions from admission requirements, or extending the period within which a component must be completed);
- the resources that candidates are allowed to use during examinations (such as an English-Dutch dictionary for candidates with dyslexia);
- the location (taking examinations in a separate distraction-free room).

Adjustments to the educational facilities may concern the following matters, among others:

- making modified furniture available in the classrooms and examination rooms;
- making special equipment available (such as magnifying or Braille equipment for blind or partially sighted students, or audio induction loops and solo equipment for students who are deaf or hard of hearing);
- making more easily accessible course material available;
- making special computer facilities available (such as voice recognition or speech synthesis software);
- making a separate distraction-free room available for a student to take an examination;
- making a quiet room available.