TEACHING AND EXAMINATION REGULATIONS

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

MASTER'S DEGREE PROGRAMME

- BIOMEDICAL ENGINEERING
- MARINE TECHNOLOGY
- MATERIALS SCIENCE & ENGINEERING
- MECHANICAL ENGINEERING
- OFFSHORE & DREDGING ENGINEERING
- SYSTEMS & CONTROL

DELFT UNIVERSITY OF TECHNOLOGY

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 programmes mentioned on page 1., hereafter to be referred to as the programme.

2. The teaching and organisation of the programme is the responsibility of the Faculty of 3mE 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 subsection 1, paragraph 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, subsection 2 and 3 of the Act; a subject can sonsist of a number of components;

g. practical: a practical exercise as intended in Article 7.13, subsection 2, paragraph 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,
- completing a project,
- 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 7.12, subsection 3 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:	a digital guide to the programme containing specific information pertaining to the various subjects;
q. institute:	Delft University of Technology;
r. Blackboard:	the electronic system designed for the exchanging of teaching information;
s. Osiris:	the electronic education register system
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 as mentioned on page 1, whereby the final attainment levels described in Article 4 must be achieved.

Article 4 – The programme's final attainment levels

(NB: The final attainment levels described in this document are general. They can be adapted for a specific programme if required.)

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. possess 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. possess an awareness of possible ethical, social, environmental, aesthetic and economic implications of their work and the insight to act accordingly;
7. possess 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 (see http://doorstroommatrix.nl/)will be admitted to the programme.
2. Students who do not possess the degree mentioned in subsection 1 are required to obtain proof of admission to the programme from the dean, who will seek the advice of the admission committee on this matter.
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" and appendix 1 "Policy on fees and enrolment" of the Student Charter (central part),
    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 programme within the allotted period.
4. Students with a foreign Bachelor's degree certificate may only be admitted to the programme if they have a Grade Point Average of at least 75% of the maximum points available.

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

Not applicable.

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. 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 downed 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 in the manner 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 Master

1. Students who meet the criteria referred to in the Implementation Regulations will be invited to register for the Honours Programme Master for outstanding Master's students.
2. Based on the criteria referred to in the Implementation Regulations, students will be selected and admitted to the Honours Programme Master by the director of studies or an Honours coordinator of Honours committee established by the director of studies.
3. The Honours Programme Master will comprise 20 credits:
   a. At least 5 credits must be completed in the TU Delft-wide component of the Honours Programme Master, which consists of the following parts:
      - the subject "Critical Reflection on Technology", WM0355HT
      - playing an active role within the Honours Programme Master community
   b. A maximum of 15 credits may be completed in the faculty component of the Honours Programme Master, the composition of which (including its content and options) is described in the Implementation Regulations.
4. Any student selected for participation in the Honours Programme Master must submit his or her options for the faculty component to the director of studies, the Honours coordinator or Honours committee for approval.
5. The Board of Examiners will be responsible for assessing whether all the requirements of the Honours Programme Master have been met.
6. Any student who has successfully completed the Honours Programme Master 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 written examinations

1. Registration to take part in a written 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 subsection 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.
   b. and
   c. 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.
7. The Board of Examiners will only agree to the request in exceptional circumstances.

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 subsection 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 will 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 14 working days before the examination takes place. It is also possible to withdraw from participation in an examination after this deadline has passed, but no later than three working days before the examination in question, at the central examination desk.
2. Any student who has withdrawn from an examination should re-register on a subsequent occasion, in accordance with the provisions of Article 12.

Section 5 – Examinations

Article 15 – Number, times and frequency of examinations

1. There are two opportunities in each academic year for written examinations:
    a. the first opportunity is at the end of the teaching period in which the subject is taught,
    b. the second opportunity is in the fifth week or at the end of the next teaching period, or during the resit period in August.
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 relevant semester.
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 subsection 1, there will be at least one chance 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 subsection 1 likewise apply to component examinations, unless the validity of the component examination is linked to a period of time in the study guide.

Article 18 – The form of examination and method of assessment

1. Examinations are set as described in the study guide.
2. The Board of Examiners may, if it so wishes, deviate from the provisions of subsections 1, 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.
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 determine the result of an oral examination as soon as it is finished and to supply the student with a written statement of the result.
2. In the case of written examinations, 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 as soon as possible informs the students.

3. Regarding any examinations that are not taken orally or in writing, 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 any written 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 subsection 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 subsections 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 subsection 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 subsection, 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 subsection 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 subsections 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 subsection 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.

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 examination or practical 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

In principle, once a month 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.

Section 9 - Study progress checks

Article 26

Not applicable.

Article 27

Not applicable.

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 the student information system Osiris.

Section 10 - Contravention, changes and implementation

Article 29 – Contravening the regulations

If the study guide 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.
4. For one additional subsequent academic year, students who were registered as Pre-Master's students on 31 August 2012, will have the opportunity to undertake Master's subjects. After 1 September 2013, students must have passed the Bachelor's degree, on which his/her admission was based, and/or completed the transition programme that he/she had to complete in addition to the Master's degree course, prior to studying further on this degree programme.

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 on August 15, 2014

Appendix Article 23

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

- 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.