

UNIVERSITY OF TWENTE.

# **Education and Examination Regulations**

## **Master Sustainable Energy Technology**

**2019-2020**

## PREFACE

The Sustainable Energy Technology (SET) programme has chosen to embed the Education and Examination Regulations within the programme-specific part of the Student Charter on the basis of Article 7.59 of the Dutch Higher Education and Research Act (WHW).

This document presents the rules (rights and obligations) of the programme and of students with regard to education and examinations. These rules apply to all students, but individual students have the right to submit a request for an alternative programme. Also, the Programme Director can decide to take a general or individual action that deviates from the regulations, provided that it is not in the disadvantage of the student(s). Note that whenever the male gender is used in this document, this can be understood as referring to the female gender as well.

For general information, reference is made to the 'Student Charter of the UT, the institution-specific part'. For special possibilities within the study programme, reference is made to the education page of the Master's programme in Sustainable Energy Technology (<http://www.utwente.nl/set>) and, for information about course content, to the Course Catalogue (<http://osiris.utwente.nl>), whenever necessary.

The Sustainable Energy Technology Education and Examination Regulations apply to all SET students. The programme is provided within the faculty of Engineering Technology (ET) at the University of Twente (UT) in Enschede.

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## ARTICLE 1. GENERAL CONDITIONS

### 1.1 Applicability of the regulation

- 1) This regulation applies to the education and the examinations of the master's programme in 'Sustainable Energy Technology, hereafter called: the programme.
- 2) The programme is provided under the responsibility of the Faculty of Engineering Technology at the University of Twente, hereafter called: the Faculty.
- 3) The final responsibility for the implementation of the education programme rests with the Programme Director and for admission and assessment with the Examination Board. A student who doubts whether he has been handled in conformance with the regulations can ask the Programme Director for clarification. It is always possible to appeal against a decision that has been taken.

### 1.2 Definition of terms

BOZ	Bureau of Educational Affairs (Bureau Onderwijszaken), Engineering Technology (SET), within Centre for Educational Support (CES)
Academic year	The time period that begins on 1 September and ends on 31 August in the following calendar year
Assignment	Carrying out a design or a research project
Canvas	The Learning Management System (LMS)
Course	A component of the study programme to which a course code is assigned
Dean	the Dean of the Faculty of Engineering Technology
EC	European Credit; a unit of study effort in which 1 EC matches 28 hours of effort; a course year is 1680 hours = 60 EC
Essay	A written report about a theoretical or practical project/assignment
Examination	An inquiry into the knowledge, the insight and the skills of a student relating to a particular unit of education, as well as the assessment of that inquiry by at least one examiner designated by the Examination Board for that purpose
Examination Board	The Examination Board of the programme constituted in conformance with Article 7.12 of the Dutch law
Examiner	The person appointed by the Examination Board for conducting examinations, in conformance with Article 7.12 of the Dutch law
Faculty	The Faculty of Engineering Technology (ET), University of Twente
Graduation examination	An evaluation by which the Examination Board determines whether all examinations of the courses belonging to the programme have been passed (in conformance with Article 7.10 of the Dutch law)
HBO-Bachelors	Bachelors from a university of professional education 'hogeschool'
Institution	The University of Twente (UT)
Internship	Assignment carried out in a company or scientific environment in order to (among others) become acquainted with the future field of the SET-student as well as with problem solving in a real company setting
Law	The Dutch Higher Education and Research Act (WHW).
Lecture	A plenary meeting for the students which is intended to convey information
Literature study	The undertaking of literature research into specified scientific phenomena
OSIRIS	The Student Information System (SIS)
Partner Institution	An institution with which the university has a structural relationship for collaboration, in which the programme is active. For example the 4TU federation

Practical	A practical exercise as intended in Article 7.13 paragraph 2 subparagraph d of the Dutch law. This is understood to mean participation in an education activity designed to master certain skills, such as completing written work or a prototype design, the carrying out of tests and experiments, and participating in field work or an excursion
Pre-Master	The Pre-Master's programme is a transfer and bridging programme for higher professional education (HBO) or university education bachelor's programme students who wish to obtain a university master's degree, but who cannot be admitted directly.
Programme	The Sustainable Energy Technology programme (SET), University of Twente
Programme Committee	The Programme Committee consists of chairmen of Departments and professors in the Faculty, whose subject area(s) belong to the domain of sustainable energy technology, as well as a member of the Board of the Faculty
Programme Director	The Programme Director of the SET programme
Project	Carrying out as a team a design or a research project
Seminar	A meeting for a subgroup of the population to offer students the opportunity to work through the learning materials (also supervised self-study).
SET	Sustainable Energy Technology; this qualification prefixing, for example, student, programme, examination, etc. is in many cases in this Charter hereafter omitted in the interests of readability.
Student	He or she who is registered as student at the University of Twente for the following of education and/or the taking of examinations of the 'SET' programme, and who has completed the payment of (legal) tuition fees (Articles 7.32 and 7.34, WHW). Wherever in this regulation the male gender is used, the female gender can also be understood
Tutorial	A meeting for students who work on exercises guided by a lecturer
Website	The website <a href="http://www.utwente.nl/en/set">http://www.utwente.nl/en/set</a>
Working day	Monday to Friday inclusive, with the exception of recognised national holidays and leave days and/or holiday period approved by the UT

## ARTICLE 2. ADMISSION

### 2.1 Requirements for previous education

- 1) Students in possession of a diploma which shows that they have passed the final examination for the following Bachelor of Science's programmes will be eligible for admission to the programme:
  - Aerospace Engineering (TUD)
  - Applied Physics (TU/e, TUD, UT)
  - Advanced Technology (pre-SET track) (UT)
  - Biomedical Engineering (TUD, UT)
  - Chemical Engineering (TU/e, UT)
  - Civil Engineering (UT)
  - Design Engineering (UT)
  - Electrical Engineering (TU/e, TUD, UT)
  - Innovation Sciences (Energy) (TU/e)
  - Mechanical Engineering (TU/e, TUD, UT)
  - Molecular Science and Technology (TUD and UT)
  - Technical Medicine (UT)
  - University College Twente (ATLAS) (UT)
- 2) Students who are not in possession of one of the diploma's mentioned in paragraph 1 will require a certificate of admission issued by the Programme Director. Admission criteria to receive a certificate of admission for the Master's programme are the same as the qualities

attained at completion of one of the Bachelor Programmes mentioned in paragraph 1) regarding knowledge, insights and skills (the preliminary Bachelor's degree).

## 2.2 Additional requirements for students with a non-Dutch qualification

Students from abroad must show they have sufficient command of the English language.

<https://www.utwente.nl/en/education/master/admission-requirements/language/>

## 2.3 Pre-Master programme

- 1) Bachelors from a Dutch university of professional education (HBO) in construction, mechanical/electrical engineering, physics, chemistry or related subjects are admitted to the pre-Master programme. Admission of others is at the discretion of the Examination Board.
- 2) The pre-Master programme consists of a selection of courses with an emphasis on physical and mathematical courses.
- 3) The pre-Master programme consists of 30 EC.
- 4) A student who successfully passes all courses in the agreed programme within eight months after registration for the pre-Master programme is admitted to the master programme.
- 5) A student who failed a pre-Master programme at one of the three sustainable energy technology programmes in the Netherlands will not be admitted to the SET pre-Master programme of the UT in a following academic year.
- 6) A student who failed the pre-Master programme SET is not eligible for another pre-Master programme within the Faculty Engineering Technology of the UT in a following academic year.

## 2.4 Following master courses by non-master students

A student has the right to follow education and/or take examinations relating to the programme, provided he has satisfied the legal regulations in force. When someone has not (completely) met these requirements and at that moment still takes part in the education and/or examinations, this is regarded as irregular. When applicable, the relevant registered student data can be removed from the administrative records and does not count for student progress nor for student grants and loans. Additional conditions can be placed on participation in the various education activities and examinations.

# ARTICLE 3. VISION OF THE PROGRAMME

## 3.1 Aims of the programme

In 2003, the three Dutch Universities of Technology (TUD, TU/e and UT) embarked on a cooperation directed towards the harmonization and coordination of research and educational efforts. The Master's programme in Sustainable Energy Technology (SET) was one of these five new programmes. The three Universities of Technology are in a good position to offer a research-oriented Master's programme, as required by the energy sector. Since 2003 the programs of the three universities are each developed from their own strength and vision. Registration at one location automatically includes registration at the other two.

The two-year English-taught Master's programme Sustainable Energy Technology (SET) at the University of Twente invites students to gain in-depth understanding of (energy) technology and engineering and to supplement that with knowledge and skills related to entrepreneurship and innovation. Building on this broad foundation, SET engineers will rise above technology pur sang to play a role as enabler, leader and game changer in the transition towards sustainable energy systems. The energy challenges that are faced today call for professionals who are as skilful in engineering as they are in business development and innovation. The SET programme will prepare engineers for this broader, more entrepreneurial role. Students will be trained in chemical, electrical, process and mechanical engineering, as well as economics, business development, innovation, supply chain management and societal change.

The collaboration of SET with the Universities of Delft and Eindhoven is included in appendix 3.

Regarding academic competences the graduate has the following intended learning outcomes:

A Master of Science graduate of the SET degree programme:

- 1) is qualified to degree level within the domain of 'science engineering & technology'
- 2) is competent in the relevant domain-specific discipline(s), namely Sustainable Energy Technology, i.e.

- 2.1 has a thorough understanding of at least one sub-area of Sustainable Energy Technology and is able to maintain and expand his/her expertise in this field
- 2.2. has the necessary knowledge and skills to evaluate a broad range of energy technologies and energy systems, taking into account technological, societal, economic and sustainability aspects
- 2.3. is able to analyse and understand the role of sustainable energy technologies in a system. Either as part of an electrical system (connection to the grid), as part of a decentralized system (like a building) or the society as a system with opportunities and barriers for the development of sustainable energy technologies
- 2.4. is able to contribute to discussions about complex matters related to the introduction of sustainable energy
- 3) is able to conduct research and design independently
- 4) has the ability and attitude to include other disciplines in their research, where necessary
- 5) has a scientific approach to complex problems and ideas
- 6) possesses intellectual skills that enable them to reflect critically, reason and form opinions
- 7) has the ability to communicate the results of their learning, thinking and decision-making processes at an international level
- 8) is aware of the temporal and social context of science and technology (comprehension and analysis) and can integrate this context in their scientific work
- 9) in addition to a recognizable domain-specific profile, possesses a sufficiently broad basis to be able to work in an interdisciplinary and multidisciplinary context. In this context, multidisciplinary means being focused on other relevant disciplines needed to solve the design or research problem in question
- 10) has the ability and attitude to seek new potential applications, taking the social context into consideration

### 3.2 Purpose of the master

The objective of the Master's programme SET is to educate academic engineers who possess scientific knowledge on and insight into the design, behaviour and performance of energy technologies and the integration of these technologies in grids, buildings and society at large. The learning outcomes ('exit qualifications') are operational definitions of the programme goals and describe the knowledge, skills and attitudes that students should have acquired after completing the programme.

### 3.3 Organisation of the programme

The Master's programme Sustainable Energy Technology is only provided as a full-time programme. The study effort of the programme involves 120 EC.

The SET programme consists of 120 European Credits (EC):

<b>Regular SET Track</b>	<b>EC</b>	<b>Bioresource Value Chain Management Track</b>	<b>EC</b>
Core programme (first year)	60	Core programme (first year)	60
Specialisation-linked elective subjects	15	Bioresources characteristics & properties courses	15
Internship / elective subjects	15	Bioresources value chain courses	15
Master's thesis	30	Master's thesis	30
<b>Total</b>	<b>120</b>	<b>Total</b>	<b>120</b>

The first year consist of 12 compulsorily courses (60 EC) that provide the student a broad foundation with elements from technology as well as from entrepreneurship and innovation. This combination of knowledge is covered in a well-balanced programme. The core programme of 60 EC in the first year is made up of courses related to four themes:

- 1) Energy sources
- 2) Technology and sustainability
- 3) Socio-economics
- 4) Design and system integration.

In the second and final year the student can complete the regular SET track or pursue the track, Bioresource Value Chain Management (BVM). Whichever a student chooses, he will become an authority in implementing technology-driven change in energy markets worldwide.

- The Regular track consists of elective courses (15 EC), an internship (15 EC) and a master assignment (thesis).
- The Bioresource Value Chain Management track consists of courses on Bioresources characteristics & properties (15 EC), Bioresources value chain (15 EC) and a master assignment (thesis).

For the regular SET track elective courses in the second year give students the possibility to acquire in-depth knowledge to effectively carry out a Master's thesis project in one of the research areas of sustainable energy technology. The courses need to be at MSc level and graded with a validated transcript of records from an accredited academic institution. For the Bioresource Value Chain Management track courses related to bioresources provide in-depth knowledge to perform a project in the field of Bioresource Value Chain Management.

The Master assignment (thesis) in both tracks takes 30 EC, which agrees with the duration of 2 quarters of 10 weeks of 42 hours. This individual master's assignment is the completion of the master's program. The main objective of the Master assignment is that the student learns and proves that (s)he is able to define, perform, complete and reflect a research project at a large degree of independence. During the master's thesis work, a student proves his level of understanding and ability to carry out a scientific research or design project, using the acquired competences, i.e. knowledge, skills and attitude. The assignment, containing social as well as technological aspects, is performed in one of the energy related research chairs of the UT under the supervision of a daily supervisor and the responsibility of a chair holder (graduation professor) and a master's graduation committee. Conditionally, the assignment can be done (partially) at an external institute or organization.

### 3.4 Language

The instruction language of the MSc programme is English, meaning that lectures and all other educational activities are taught in English and examinations are in English as well.

### 3.5 Internationalisation

The programme has the aim of allowing all students to have an international experience during the study. This can be a company internship, an internship in a university or scientific institution, a graduation project and/or following of a number of regular courses at a foreign university (preferably not in the first year). For the extra costs made for this purpose, there are subsidy regulations for which only once during the programme it is possible to claim. See the subsidy regulations:

<http://intoffice.utwente.nl/en/financial/>

## ARTICLE 4. EDUCATION AND PROGRAMME

### 4.1 Provision of information

- 1) A course description, method of examination and the form of the education should be published before the start of the course. For this purpose reference is made to the 'OSIRIS course information' on the internet, with the reservation that education is susceptible to continuous change. The most up-to-date course information, as it is applicable, is found on Canvas.
- 2) The programme ensures the registration of study results.

### 4.2 Composition of the personal study programme

- 1) The first year consists of 12 compulsory courses. Every student is entitled to 2 wildcards to replace a compulsory subject with another subject. The student submits a substantiated request to the Programme Director.
- 2) The student composes a programme for the second year together with a professor in the Department or research group to which he is assigned (called graduation professor or chair holder). This programme requires the approval of the Programme Director.
- 3) The student hands in the approved study programme to BOZ at the latest at the beginning of the second year. Even if this is in many cases a provisional programme, handing it in on time is crucial for the student (admission to courses, and being sure that the course may make part of the graduation programme).
- 4) In order to be able to make a proposal for the study programme mentioned above, students can use the pre-laid-out form for the study programme on the website <http://www.utwente.nl/set>.
- 5) When the examinee wishes to make changes to the choice of one or more courses of the programme which has already been approved, he can submit a request to that effect to the

relevant graduation professor. For this purpose the form 'Change of master courses' is available on CANVAS.

- 6) A course may only be a part of one of the master programmes.

#### 4.3 The free education programme

- 1) As an exception, approval can be given to the taking of a master's examination on the basis of a programme of courses composed by the student.
- 2) The Examination Board determines whether the free programme is actually built upon education units which are provided by an institution of higher education, whether the study effort is sufficient, and whether that programme has the required level.
- 3) The 'required level' mentioned in 4.3.2 relates to both the programme of courses and to the master's project.
- 4) When the Examination Board does not approve the proposal which has been submitted, it must give clear reasons for its decision.

#### 4.4 UT two-master programmes

Students who would like to follow two UT master programmes simultaneously, must comply with the intended learning outcomes of both programmes and be admissible to both programmes.

For SET it means the following: all fixed courses of the first year SET curriculum must be followed.

Just like all other students, 2 wild cards of 5 EC each can be used to replace courses. Only one internship of 15 EC needs to be done. Also the compulsory courses from other programme must be followed. Some of the courses may appear in both programmes. The Master thesis assignment incorporates themes of both master programmes and is increased from 30 to 60 EC. The total time effort for the two master programmes is 180 EC, allowing 45 EC for the Non-SET master plus possibly 10 EC when the two wild cards are used. The Examination Board determines whether the free programme is actually built upon education units which are provided by an institution of higher education, whether the study effort is sufficient, and whether that programme has the required level.

#### 4.5 Regulation for including international courses in the master's study programme

- 1) For this purpose and well before departure to the university abroad, the student makes an agreement with the specialisation coordinator. The student explains the reasons for his request and provides the necessary (course) information.
- 2) The specialisation coordinator is responsible for determining the level of the course(s) to be taken abroad. He can delegate this to a UT teacher who provides a comparable course. In principle the international course must have a level equivalent to that of UT courses.
- 3) No international courses may be included which substantially overlap with regular UT courses which have already been completed or which still have to be completed.
- 4) There is no automatic conversion of international study points into UT study points (EC). BOZ determines the number of ECs. The starting point for this is the agreements in the framework of the ECTS (European Credit Transfer System).
- 5) The maximum number of EC's for international courses which can be taken up in the core and elective programme is 30 EC. The surplus of courses can be added to the marks list of the degree certificate as 'extra courses'.
- 6) One exception can be made relating to 'the maximum number of international courses' in point 5: when the student participates in a master's programme that is setup together with a partner university, and the education and assessment of it takes place at the partner university. The [relevant] programme should be approved and countersigned beforehand as-a-whole by one of the professors of the Faculty and by the programme director.
- 7) When possible, BOZ uses the international names of the courses on the International Diploma Supplement.

#### 4.6 Time periods, times and frequency

- 1) At the beginning of a quarter a timetable is published in which the dates of written examinations are stated.
- 2) In the case when an examination can be taken orally, this can be taken at a time determined by the examiner(s) in consultation with the student and, if the student so wishes, at the latest within a month after the request (the holiday period not being counted).
- 3) For each of the courses of the master's programme which are not published in an education timetable, the examiner who is appointed by the Examination Board with conducting the

examination in such a course, determines, as far as possible in consultation with the student(s), a time when the examination can take place.

- 4) The examination for the courses which are taken as written examinations, can be taken at least twice per course year, once immediately after the period in which the teaching in that course is provided, and once at such a time that there is a reasonable gap between two successive examination opportunities.  
Examinations (oral and written) in courses for which the teaching is not offered every year can, at the request of a student, be taken at least once every academic year.
- 5) Every student has the right to complete every course of the relevant academic year, unless the student has been excluded from participation in the relevant education or examination. The student progress, the results of conditional tests, the score in one of the contributing courses or the absence from education activities or examinations for which one has registered, can in the extreme case be reasons for excluding a student from (further) participation.
- 6) When a change of existing courses, or a substantial change of the material in a course, is made and approved by the programme director, a student who has participated at least once in the examination of the relevant course before the changes were made has the right to be re-examined in the course in its "old" form at the first timetabled opportunity in the adjoining academic year.
- 7) In special cases and by student request, the Examination Board or the relevant examiner can allow a deviation from the times listed in clause 4.6.4.
- 8) Concerning an examination relating to a course which is not taught within the programme, the sequence and time periods in the education and examination regulations valid for that course are applicable, except for a deviating decision made by the Examination Board.

#### 4.7 Structure of practical exercises

For practicals, there is an enrolment and participation obligation. The course itself describes how the study unit will be completed. Absence during a study period may result in failing of tests, exams, projects or practical exercises. The programme accepts no responsibility for students absenteeism.

In the event of force majeure (e.g. illness), the student must immediately contact the lecturer responsible for the study unit from which they were absent.

#### 4.8 Internship

- 1) The extent of the internship is 15 EC (10.5 nominal study weeks, including writing the report). The extent of the internship is determined beforehand, and depends on the nature, scope and extent of the project and the necessary residence period.
- 2) The internship may be started after at least 40 EC of the master's programme has been registered in Osiris.
- 3) Students with considerable industrial experience (for example from a university of professional education or a foreign university) are not obliged to do an internship (stage). Instead of an internship they can follow 15EC master courses.
- 4) If, after the internship has begun, it is determined that it will not be possible to achieve the intended learning effect, the student will contact the programme to discuss the consequences. It is up to the student to give a timely signal. In all situations when the cause of a non-optimal internship does not rest with the student, an adequate making-good of the lapsed study time will be determined in a flexible manner. The graduation professor takes the initiative for this.
- 5) The student takes the initiative for arranging an internship location and a suitable project. The programme supports this. For this purpose an internship coordinator is appointed. The internship coordinator determines whether the project conforms with the general UT and programme policies and provides adequate administrative support.
- 6) During his internship the student receives supervision from a staff member of the programme (usually from the Department within which he will graduate).
- 7) The student is obliged to register his internship in Mobility Online. Only after the approval of the supervisor and the internship coordinator the internship will be part of the student's study programme.
- 8) The programme will make no financial demands on the organisation which provides the internship.
- 9) Further information about the practical carrying out of the internship and/or the subsidy regulation is available from the SET internship coordinator. See [https://www.utwente.nl/en/set/master\\_programme/student\\_mobility/](https://www.utwente.nl/en/set/master_programme/student_mobility/)

#### 4.9 Approval, publications and registration

- 1) After the end of an oral examination, the assessment is confirmed within one week and published to the student.
- 2) Within 20 working days (not counting the academic holidays) after the end of a written examination, after the handing in of a project or after the finishing of a practical, the result of it is published. When there is the opportunity of a quick re-examination for the relevant course, the checking time is shortened to such an extent that the student can reasonably prepare for the re-examination.
- 3) If the period stated in clause 4.8.2 is exceeded, the Examination Board can in the most extreme case determine or allow the determination of the result of an examination.
- 4) The results of written examinations, projects and practicals are published in 'OSIRIS'. When there is lack of clarity about the result, the declaration countersigned by the examiner is the valid result.
- 5) Errors in overviews; When a mistake has been made in a marks list or an overview which relates to the study progress of a student, both the programme and the student are required to make it known to the other party as soon as it is discovered, and to work together to annul the mistake that has been made. The administration of the programme discloses complete information unless indicated to the contrary. When there is evidence to the contrary, in every case the examination work assessed by the teacher is valid.
- 6) BOZ ensures the registration of the assessments and the results of the examinations.

#### 4.10 Duration of validity of assessments

- 1) The results of examinations which have been taken are valid without time restriction. In deviation from this, for a course for which the examination was passed more than six years beforehand, the Examination Board can impose an additional or resit of the examination.
- 2) In special circumstances the Examination Board can extend the duration of validity of assessments stated in the previous paragraph by a period the length of which it determines.

#### 4.11 Right of inspection and discussion

- 1) The student is entitled to inspect and discuss his test together with the examiner, and the examiner is to explain the assessment.
- 2) If there is no collective discussion of the test, then a student may submit a request to the examiner for an individual discussion within ten days after publication of the results. The individual discussion must take place no later than three working days prior to the next test opportunity.
- 3) The (collective) discussion must take place no later than five weeks after the publication of the test results, but at least three working days prior to the next test opportunity, in the presence of the examiner or a designated substitute.
- 4) The student has a right to inspect his assessed work for a period of two years following the assessment.

#### 4.12 Quality assurance

The Programme Director is responsible for the design and implementation of a systematic procedure for evaluating (the parts of) the programme, in particular for the elements 'quality' and 'feasibility' ('studeerbaarheid').

## ARTICLE 5. FINAL DEGREE

### 5.1 Examination of the programme

- 1) The programme is completed with the master graduation assignment.
- 2) The master graduation assignment will be assessed by a graduation committee.

#### 5.1.1 Requirements

- 1) The master thesis must be within the territory of one of the directions of the programme and can be taken at one of the departments of the UT, or at an external organization.
- 2) The student is the only author.
- 3) The master graduation assignment is written in the language of the programme (English).
- 4) The student can start with the master graduation assignment when all the courses of the 1<sup>st</sup> year have been completed and registered in Osiris and the internship is fully completed. If a student does not meet the entry requirements, his (intended) supervisor will also be informed.
- 5) Before the start of the graduation the students should complete the application in Mobility Online and provide all required agreements.

- 6) The graduation lecturer may, after consultation with the study adviser, deviate from the restriction in paragraph 4 if this restriction causes considerable loss of time for the student.

#### 5.1.2 Duration

- 1) The duration of the master thesis corresponds to the applicable study load of 30 EC.
- 2) At the beginning of the graduation, agreements are made about, at least, the nature of the assignment, the planned start date of the master thesis, the manner of guidance, and the date on which the final report must be handed in;
- 3) The agreements made in paragraph 1 and 2 are recorded in writing prior to or on the start date of the graduation period in Mobility Online;
- 4) During the graduation the student is supposed to submit the milestone forms on time. Participation in the Home Coming Day is also mandatory.
- 5) The graduation report is submitted to the chairman of the graduation committee for review. If the graduation report is approved, the chairman issues a statement that can be used by the student to apply for the final examination. If the graduation report is not (yet) approved, the chairman indicates clearly what additions and/or changes to the master thesis or the graduation report are required. A new date is set on which the revised graduation report must be handed in. If necessary, this procedure is repeated. The approved report should be available for the committee two weeks in advance of the graduation date
- 6) If the graduation committee is of the opinion that the work done by the student is insufficient, the committee may decide, in consultation with the programme director, that the student has to do another graduation assignment. The same applies if the student fails to hand in the reports or hands them in far too late.

#### 5.1.3 Members of the graduation committee

The graduation committee consists of at least three members authorised to conduct examinations:

- 1) One of the full professors (or ius promovendi) from the relevant Department is chairman of the graduation committee.
- 2) When there is no professor available, the Department chairman can propose another member of the academic staff of the Department to the Examination Board;
- 3) At least one member is from academic staff, excluding PhD's, of the UT from another chair.
- 4) The Examination Board can invite a professor from outside the Faculty to function as chairman of the graduation committee.

The chairman of the graduation committee can invite others as experts to attend the examination session as guest. Guests have no voting rights. Members of the Examination Board and the programme director are always empowered to attend examination sessions.

The meetings of the graduation committees and of the Examination Board take place in closed session.

When a member of the graduation committee is prevented from attending an examination session, he can be replaced by a member who has authority to conduct examinations. The substitute should identify himself as such to the chairman before or at the start of the meeting. The substitute has the voting rights of the member he replaces.

#### 5.2 Degree

- 1) To show that the Master's examination has been successfully completed, a degree certificate is awarded by the Examination Board. The degree certificate is countersigned by the persons stated in the regulations from the Examination Board. The award takes place in public; in special circumstances the Examination Board can deviate from this.
- 2) The International Diploma Supplement (WHW art. 7.11, section 4) is added to the examination certificate. The objective of this supplement is to provide insight into the content of the completed programme for the purpose of international identification of the programme.
- 3) 'Extra courses' are stated when applicable, provided these were added to the study programme on request of the student with the approval of the Programme Director. The stated 'extra courses' make no part of the total programme. These courses should have been satisfactorily completed.

## ARTICLE 6. STUDENT GUIDANCE

### 6.1 Student guidance

- 1) The Dean is responsible for student guidance, including informing students of opportunities for academic endeavour within the programme and via extracurricular avenues.
- 2) Each student is appointed a Study Advisor.
- 3) The Study Advisor supervises the student and advises him on study-related matters, as well as personal problems that may be affecting the student's studies.
- 4) If a student wishes to make use of his right to specific supervision or special facilities, they must contact the Study Advisor. The Study Advisor records the agreements made with the student.
- 5) The following applies to the entitlement to special facilities:
  - a) demonstrable circumstances beyond the student's control or extenuating personal circumstances;
  - b) if necessary and when possible, dispensation from participation in exams or tests and/or the availability of special facilities for exams and tests. Such dispensation and additional opportunities for tests may only be granted by the Examination Board.

### 6.2 Studying with a disability

- 1) A functional impairment is a physical, sensory or other functional disorder that might limit the student's academic progress.
- 2) The Study Advisor and the student will discuss the most effective facilities for the student as referred to in Article 2 of the Equal Treatment of Disabled and Chronically Ill People Act (WGB h/cz).
- 3) Facilities are to be aimed at removing specific barriers in the teaching programme or when it comes to taking exams. When necessary, these facilities may be related to access to infrastructure (buildings, classrooms and furnishings) and study materials, adjustments to the form of assessment, alternative learning pathways or a customized study plan. The facilities are to ensure the student's chances of achieving the final attainment targets.
- 4) Based on the interview referred to in paragraph 2, the student is to submit a request for facilities to the Dean, preferably three months before the student is to participate in classes, exams and practical exercises for which the facilities are required.
- 5) The request is to be submitted along with supporting documentation that is reasonably necessary for assessing the request (such as a letter from a doctor or psychologist registered in the BIG register, or in the case of dyslexia from a healthcare psychologist or special education needs expert, also registered in the BIG register).
- 6) The faculty Dean will decide on the admissibility of the request as referred to in paragraph 4 and will inform the student and the Study Advisor of the decision within 20 working days after receipt of the request, or sooner as the urgency of the request dictates.
- 7) The Study Advisor will ensure that the relevant parties are informed in good time about the facilities granted to a student with a functional impairment.
- 8) Should the faculty Dean reject the request in full or in part, the Dean is to inform the student of the justification for the rejection and the possibilities for lodging an objection and an appeal. A written objection must be submitted in writing within six weeks after the decision has been communicated to the student. The objection is to be submitted to the objections, appeals and complaints office via the Student Services desk.
- 9) Should extra facilities be granted, the period of validity will also be indicated. The applicant and the Study Advisor will evaluate the facilities before the end of this period. During this evaluation, parties will discuss the effectiveness of the facilities provided and whether they should be continued.
- 10) If a student is dyslexic, he will be granted a maximum of 15 extra minutes for each hour that a test or exam is officially scheduled.

## ARTICLE 7. AMENDMENTS, TRANSITIONAL ARRANGEMENTS, APPEALS AND OBJECTIONS

### 7.1 Conflicts with regulations

If other additional regulations and/or provisions pertaining to education and/or examinations conflict with these Education and Examination Regulations, the provisions in these Education and Examination Regulations will prevail.

## 7.2 Administrative errors

If, following the publication of an exam result, a marks sheet, or an student's progress report, an alleged error is discovered, the discoverer, be it the university or the student, is required to make this known to the other party immediately upon finding the error and to cooperate with rectification of the error.

## 7.3 Amendments to the regulations

- 1) Amendments to these Education and Examination Regulations are enacted by the Dean in a separate decree.
- 2) In principle, amendments to these regulations do not apply to the current academic year. Amendments to these regulations may apply to the current academic year if the interests of the student are not prejudiced within reasonable bounds, or in situations of force majeure.
- 3) Amendments to these regulations have no effect on earlier decisions by the Examination Board.

## 7.4 Transitional arrangements

- 1) In the case of amendment of these Education and Examination Regulations, the Dean is to enact a transitional arrangement as necessary.
- 2) The transitional arrangement is to be published on the degree programme's website.
- 3) General principles for the transitional arrangement in the case of changes to the curriculum:
  - a) Changes to the curriculum are to be announced prior to the academic year in which the changes take effect.
  - b) No guarantee can be made that all programme study units that were part of the curriculum when a student enrolled in a programme will continue to be part of the curriculum..
- 4) The transitional arrangement will always include:
  - a) an explanation of which discontinued study components are equivalent to which study components, or parts thereof, in the changed degree programme;
  - b) an indication that if a study component that does not involve a practical is dropped from a programme, then students are to have at least two opportunities in the following year to take a written or oral exam or to undergo another form of assessment.
  - c) an indication that if a study component with practical exercises is dropped from the programme and there is no opportunity in the subsequent academic year to complete the practical exercise, then at least one study unit will be designated that may be completed as a substitute for the study unit that has been dropped;
  - d) the period of validity of the transitional arrangement.
- 5) The transitional arrangement must be approved by the Examination Board with regard to the provisions of paragraph 4.
- 6) In exceptional cases and to the student's benefit, the Examination Board may deviate from the prescribed number of opportunities to sit exams related to study component that have been dropped from the curriculum.

## 7.5 Assessment of the Education and Examination Regulations

- 1) The Dean is responsible for the regular assessment of the Education and Examination Regulations and is to take into account the time involved for the student for the purposes of monitoring and adjusting the study load, if necessary.
- 2) In accordance with article 9.18 of the Higher Education and Research Act, parts on the Education and Examination Regulations need the approval of the Programme Committee. On other parts the Programme Committee can advise.

## 7.6 Appeals and objections

An objection against a decision by the Examination Board or by an examiner or an appeal against decision by the Dean based on these Regulations must be submitted in writing within six weeks after the decision has been communicated to the student. The objection is to be submitted to the objections, appeals and complaints office via the Student Services desk.

## 7.7 Rights of ownership

The rights of ownership of the results of tasks, assignments and projects which are carried out in the framework of the programme rest with the Faculty of Engineering Technology.

No rights can be derived to the relevant student for (parts of) results of a project, research or assignment undertaken under the commission of the UT, unless this is agreed with the Faculty management before the start and is confirmed in writing. Agreements with the company concerning

the public access to the results, the final report and the duration and extent of confidentiality should be confirmed beforehand by the board of the faculty Engineering Technology.

#### [7.8 Hardship clause](#)

The Examination Board may allow derogation from the provisions of these Regulations in the event of demonstrably compelling unreasonableness or unfairness.

#### [7.9 Publication](#)

The Education and Examination Regulations and the Examination Board's rules and guidelines are to be published on the degree programme's website.

#### [7.10 Date of effectiveness](#)

The date of effectiveness of these regulations is 1 September 2019.

## APPENDICES

### Appendix 1: Procedure for master examination, colloquium and award of degree

The programme can proceed to the award of the master's degree certificate when the student has met the following requirements:

- 1) Well before the graduation the student contacts the graduation professor in order to determine the graduation committee, graduation date and room. Also see the Graduation Handbook and/or the relevant graduation regulations within the Department;
- 2) The student ensures that the 'Registration for the Master's degree award' form and the colloquium form countersigned by the graduation professor are handed in at the Bureau of Educational Affairs (BOZ) four weeks (20 working days) before his examination;
- 3) BOZ then sends the student an e-mail (and a copy to the graduation teacher) with the study data of not-yet-completed study phases(s), with the request to check these data within a week. When it's necessary to tidy things up, change, delete and/or add courses, the student needs to hand in a copy of the 'Form for proposal for changes to Master's courses' countersigned by the graduation professor at BOZ;
- 4) Immediately thereafter, BOZ checks all study data and, when applicable, the form proposals for changes if this has been handed in;
- 5) The marks of all courses, except the graduation project, must be handed in at BOZ three weeks before the examination;
- 6) If all requirements for passing have been met, BOZ registers the student with Student Services (done in writing BOZ two weeks before the examination);
- 7) The student ensures that at the time of the graduation project examination he is registered for the programme of the UT;
- 8) Student Services checks whether the student has met (registration) requirements;
- 9) Once each week, BOZ authenticates and registers all the relevant degree certificates at Student Services.
- 10) About one week before the examination, the student hands the report of the graduation project in digital form, preferably by e-mail (and in Word or PDF format) at BOZ. When the rules above have been met and the examination is completed successfully by the student, the student can immediately thereafter sign and receive the degree certificate which has been signed by the chairman of the Examination Board of Engineering Technology and the graduation professor. The English language diploma/degree supplement is also awarded.  
**In exceptional circumstances, such as a large number of students graduating or the holiday period in July and August, BOZ is not able to hand over the degree certificate in time for the award directly after the colloquium. The degree certificate can be obtained at a later time arranged by BOZ or the Department.**
- 11) After the final mark of the examination has been given to BOZ and has been processed, the transcript of records (in Dutch and English) is sent to the student as soon as possible by BOZ.

All the forms mentioned above can be obtained from the Bureau of Educational Affairs or can be downloaded from the SET website:

[http://www.utwente.nl/set/master\\_programme/graduate\\_procedure/](http://www.utwente.nl/set/master_programme/graduate_procedure/)

## Appendix 2: Assessment of the master examination

### 2.1 General remarks

- a. In the assessment of the master's project, it is determined whether the candidate satisfies the aims of the programme. The aspects of assessment are:
  - The level of the contents of the work undertaken in the light of the aims of the programme;
  - The demonstrated skills of the engineer (working in projects, independence, approach to design, scientific/academic attitude);
  - Communications skills (report, presentation, communication with colleagues in company and in the Department).
- b. These aspects are tested by reference to the report (thesis), the presentation, the oral cross-questioning and the approach to the problem (Master's problem). Marks for each component are used to substantiate decisions and for giving feedback. The final mark is not the average of the component marks.
- c. In the case of a complete and regular master's programme, the student passes when the following conditions have been satisfied:
  - the assessment of the master's project is satisfactory;
  - every mark is at least a 6, 'exempt' (vrijstelling, Vr) or 'sufficient' (voldoende, V).
- d. If the student has passed, BOZ will send the result with date of passing to Student Services.

### 2.2 Assessment protocol Master thesis SET

This protocol was set up to support the assessment of master theses within the MSc-programme Sustainable Energy Technology.

The assessment of the master thesis takes place after the public colloquium and the discussion/questioning in a closed meeting of the student with the master graduation committee. The assessment is done in a short, closed meeting of the master graduation committee without the student. The assessment is performed by the university members of the master graduation committee. External members have an advisory-vote. At the assessment, several aspects are taken into account (as described below and in appendix 2.3). Appendix 2.4 presents profiles for final grading that indicate how the quality of the master thesis as a whole can be translated into a final grade. The list of aspects for assessment and the profiles for final grading offer guidelines for a more equalized assessment of master theses and offer clarity to the student about the way he or she will be assessed. The aspects for assessment and the grading profiles were set up according to the learning goals of the master thesis and (partially) on the final qualifications of the MSc-programmes.

Regarding the assessment aspects, five main aspects are distinguished:

1. With respect to content: quality of research or design
2. Report
3. Working process during master thesis project
4. Oral presentation
5. Defence

Appendix 2.3 lists all aspects within these five main categories. When assessing a master thesis, the committee will address these five main aspects and determines the strong and weak points of the student's work and gives grades (not necessary integers) on each of these main aspects. This is registered by the chairman of the master graduation committee on the Assessment Form MSc-thesis SET (appendix 2.5). Subsequently the committee determines the final grade (should be an integer) for the master thesis according to the final grading profiles (see Appendix 2.4).

After determination of the final grade, the master graduation committee invites the student for the closed meeting and announces the final grade and presents the feedback on the assessment form orally to the student.

### 2.3 Aspects for assessment

#### 1) *With respect to content; quality of research / design*

- insight in subject matter
- depth (detailed elaborations, use of literature)
- insight in coherence between different parts of the research project

- reasoning / argumentation of conclusions (are research questions clearly stated and answered?)
- relevance (scientifically, but also applicability in practice) (being able to put research into its context)
- creativity / inventiveness: extent to which the student independently introduces new concepts
- extent to which the research contributes to new knowledge / contributes to a concrete product, design or model
- learning (quality and quantity)

#### 2) *Report*

- composition, structure
- consistency
- clarity/sharpness of formulations
- readability
- editing, lay out
- images and tables (usefulness, added value)
- references to literature

#### 3) *Working process during master thesis project*

- attitude
- independence
- commitment/enthusiasm
- cooperation
- communication skills
- incorporation of feedback
- functioning within the organisation where the project is carried out
- student's attitude during progress meetings (active / passive)
- the extent to which the original research proposal has been met and reasons for alterations (keeping up with a work planning, follow up on appointments made)
- time needed to finish master thesis

#### 4) *Oral Presentation and defence*

- content (what is included / not included in the presentation; is the message coming across?)
- structure / outline presentation
- care of details / neatness
- captivating way of presenting (verbal capabilities, posture)

#### 5) *Defence*

- insight in subject matter and its relation with adjacent subjects
- answering questions / discussion
- ability to interpret/understand/analyse questions

## 2.4 Profiles for final grading

### 5. insufficient

The research and / or report are insufficient and the student was strongly directed by his or her supervisors. Weak points can clearly be pointed out. The student did not show an academic attitude. On average, the student scores 'insufficient' on all aspects for assessment.

### 6: sufficient

With respect to content, the research was conducted sufficiently. The report is mediocre. Weak points can clearly be pointed out, but are compensated by aspects on which the student performs better. The student has shown little input of his own and was strongly directed by his or her supervisors. On average, the student scores 'sufficient' on all aspects for assessment.

### 7: amply sufficient

With respect to content, a solid piece of research was delivered. The report is carefully edited. Either the research process or the mastery of subject matter leaves room for improvement.

The supervisors clearly had a steering influence on the final product. The student scores at least 'sufficient' on all aspects for assessment and 'good' on some aspects.

### 8: good

With respect to content, the research was set up in a solid way and was carried out accurately. The report is carefully edited regarding language, structure as well as lay out with minimal input of the supervisors. The student has worked independently and was able to put forward his or her own initiatives. Guidance given by the supervisors was minimal. On average, the student scores 'good' on all aspects for assessment.

### 9: very good

The research is innovative and can be converted to an article for a renowned (scientific) magazine or a conference proceedings without putting in too much effort. With respect to content, the research is very solid with some points that can clearly be pointed out as very good. The report is carefully edited and shows that the student disposes of very good writing skills. The student's own input and independence are large. The student clearly stands above subject matter and is able to defend his or her statements in discussions well. The student scores at least 'good' on all aspects for assessment and 'very good' on some aspects.

### 10: excellent

The student functions at the level of an expert in the field. With respect to content, the research is excellent. The student is very capable of conducting research independently. The report and the presentation show that the student disposes of excellent communication skills (written and oral). The student scores at least 'very good'.

2.5 Assessment form MSc-thesis SET

**MASTER'S EXAM:**

Name :  
 Student number :  
 Master's track :  
 Graduation professor :  
 Master's programme : attached  
 Date master's examination :

Oral presentation : \_\_\_\_\_

Report : \_\_\_\_\_

Defense : \_\_\_\_\_

M-assignment (content) : \_\_\_\_\_

M-assignment (process) : \_\_\_\_\_

FINAL GRADE : \_\_\_\_\_

The graduation committee hereby states that  
 The status of the final report will be\*:  
 O = "**Confidential**" (for a period of \_ years)  
 O = "**Public**"  
 \*) tick the appropriate box

RESULT : \_\_\_\_\_

Graduation committee:

Prof.dr.ir. XX  
 Dr.ir. YY  
 Prof.dr.ir. ZZ

Signature:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Criteria	Motivation (What went well, What could have been improved)
Oral Presentation	
Report	
Defence	
Content (quality of research or design)	
Working process during project	

### Appendix 3: Collaboration within 4TU

- 1) The Master's degree programme in Sustainable Energy Technology is a 4TU MSc program. The programme is offered at TU/e (Eindhoven University of Technology), TUD (Delft University of Technology) and UT (University of Twente). The programmes have similar learning objectives. The courses and specializations at each university are different. Each program has a different CROHO number (programme registration according to the WHW).
- 2) After a student is formally enrolled in the Master's program in Sustainable Energy Technology at one of the 3 universities he will also obtain a secondary enrollment (neveninschrijving) at the 2 other universities.
- 3) Students are allowed to choose elective subjects from the lists of elective/specialization and core courses from each of the 3 programmes, after consultation with the mentor/supervisor from the home university and after approval by the Examination Board of the home university.

## REGULATIONS OF THE EXAMINATION BOARD

### Rule 1. Examination Board

- 1) The Dean of the Faculty will establish an Examination Board
- 2) The authority of the Examination Board covers all study components that are part of the student's programme.
- 3) The Examination Board consists of at least four members, including two professors.
- 4) The Examination Board consists of at least three staff members who are tasked with providing the programme's education and at least one "external member" not directly involved in the programme.
- 5) For the purposes of holding the exams, the Examination Board will appoint one or more examiners for each examination unit. If there are multiple examiners for one study component, final responsibility will be assigned to one examiner.
- 6) Only staff members tasked with providing the programme's education or experts from outside the university (article 7.12 WHW) may be appointed as examiners.
- 7) If (parts of) a study component are assessed by different examiners, the examiner with final responsibility will ensure that these assessments are all based on identical standards. The results for parts of an exam (tests, partial assignments) are recorded in writing by the examiner in their own administration. The results of the tests are recorded in OSIRIS. Grades for subtests are recorded by the lecturer in their own administration.
- 8) The Examination Board may receive assistance from staff members involved in the programme, e.g. the Programme Director, the programme coordinator, the study advisor and/or mentors. They play an advisory role during meetings. The Examination Board may decide to delegate its authorizations to the chair or secretary and to delegate the execution to the programme board, in so far as the law or these regulations allow.
- 9) The meetings of the Examination Board are private.

### Rule 2. Granting examination authorizations

The Examination Board draws up a list of examiners. In general, the person with primary responsibility for the education will also have primary responsibility for the assessment of the course results. The Examination Board uses the following criteria:

- 1) Examination authority is granted to members of the UT's permanent or temporary staff (lecturers, senior lecturers, professors, teachers) who have met the education qualification requirements and are involved in the programme.
- 2) The authorization is limited to the disciplines in which the staff members are recognised as experts.
- 3) The authorization is limited to the next-lowest education level following the level at which the examiner has been educated.
- 4) Staff members from partner universities also have examination authorization, provided that they meet the aforementioned requirements.
- 5) In all other cases, the Examination Board will decide to grant someone examination authorization. This decision will mention the authorization's period of validity and the discipline.
- 6) As a general rule, PhD and post-doc students must have assisted in the examination of a similar examination unit at least twice before they may be granted examination authorization for that unit.

### Rule 3. Principles of the Examination Board

- 1) For all organisational matters pertaining study programmes, the nominal programming of the education takes precedence. The regulations for examination stimulate studying in cohorts and attempt to prevent any study delays that would disrupt the programmatic order of the study programmes.
- 2) The Examination Board has the right to derogate from the education and examination regulations in certain cases in which the education and examination regulations explicitly grant this right. The Examination Board asks study advisers for advice regarding any decisions that concern individual students. Any information provided by the student in question will be treated confidentially. The student's study plan and any known causes of their study delay will be taken into account.
- 3) Regarding the situations referenced in paragraph 2, the following applies:
  - a) If a student is seen as promising (pace of study at least 0.75), the Examination Board will consider whether their decision will contribute to the student's ability to complete their master programme in two years;

- b) If the student has incurred a significant study delay (pace of study between 0,5 and 0,75), the Examination Board will consider whether there are sufficient reasons to assume that – based on the student’s study plan and their most recent results – their decision will prevent the student’s pace of study from dropping any further;
- c) If the student is seen as disadvantaged (pace of study equal to or lower than 0,5), the Examination Board will consider whether their decision will improve the chance that the student will soon reconsider their study choice or the chance that the student successfully completes this programme.

#### Rule 4. Writing and design of exams and examination methods

- 1) Before an examiner holds an exam or test, at least one other expert lecturer will evaluate whether the exam or test in question is sufficiently representative, whether the questions are formulated unambiguously, whether the difficulty matches that of the education itself and whether the exam or test can be completed well within the available time by properly prepared students.
- 2) At a student’s request, the Examination Board may permit an exam or test to be taken in a different manner than stipulated in the first paragraph.

#### Rule 5. Written and oral exams

- 1) An individual oral exam will take no longer than 1.5 hours. An oral exam or test for a group of students will take no longer than four hours. The duration of a written exam or test is listed on the exam or test itself. The duration of an oral exam will be announced before the exam or test.
- 2) A written exam or test is evaluated based on predefined standards for the various questions or parts of questions that make up the exam or test.
- 3) The maximum number of points that can be earned per question of a written exam or test will be announced to students by listing it alongside each question.
- 4) If, while the exam or test is being held, it turns out that the possibility of completing the test within the available time was incorrectly assessed, either due to the clarity of the questions or due to the difficulty of the exam or test, the examiner will immediately report this fact to the Examination Board.  
The Examination Board is authorised to prescribe new standards to account for this fact. These new standards may not demonstrably affect students in a negative manner.
- 5) At least two examiners will be present during an oral exam or test for which more than two students will be assessed at the same time.
- 6) Oral exams or tests that are held for a group of students are private.
- 7) At all times, a member of the Examination Board has the right to attend an exam or test or to be represented by a substitute. The position of a substitute will be explained to the examinees.

#### Rule 6. Registering for exams

- 1) Registration is required for written examinations.  
The timetable states up to which day it is still possible to inscribe for the examinations of each separate semester. Bearing in mind the dates indicated in the previous sentence, inscribing for examinations should take place using 'OSIRIS', unless otherwise informed.  
Not registering in the stated manner before the closing date for inscription, cancels the right to participate in the relevant session. Even if participation is allowed by the relevant invigilator, this does not automatically confer the right of assessment of the work handed in.
- 2) A student who has registered for the examination and without valid reason does not appear can be excluded from participation in the next examination session of the relevant course.
- 3) Registration is required for the master’s examination. The registration takes place at BOZ (see Appendix 1).

#### Rule 7. Order during exams

- 1) During each exam or test, the examiner will appoint one or more examination supervisors to ensure that the session proceeds in an orderly fashion. At least one of the examination supervisors is involved in the education of the study unit in question.
- 2) During an exam or test, a student must be able to identify themselves with their proof of registration (student ID).
- 3) If a student is delayed, they may still participate in the session up to fifteen minutes after the start of the exam or test.
- 4) Students may not leave the session during the first thirty minutes following the start of the exam or test.

## Rule 8. Fraud

In the case of fraud, the student has the right to finish the exam. The examination supervisor informs the examiner. The work of the student will not be assessed and the Examination Board is informed. The Examination Board can exclude the student from participation in the relevant exam for a maximum period of 1 year. In the case of preconceived fraud, the Examination Board can exclude the student from participation in (any) exams for a maximum period of 1 year.

Fraud is defined in the general UT Students' Charter 2019-2020.

The following rules apply for preparing written work, programming assignments, etc.:

### Individual assignments

There is one author who will receive an individual grade based on the assignment.

If passages are included or information is used which are/is derived from other people's work, the student must clearly indicate:

- which passages these are (e.g. by printing them in italics or between quotation marks);
- where they come from (by providing a clear source reference: a formal literature reference or a phrase such as "verbal information from Mrs XX").

### "Individual" group assignments

Different group members are responsible for different components of the assignment.

- clearly list which group member was responsible for which component of the assignment;

If passages are included or information is used which are/is derived from the components written by other group members, the student must clearly indicate:

- which passages these are (e.g. by printing them in italics or between quotation marks);
- where they come from (e.g.: "...added to the fact that measures have shown this effect to be negligible (see chapter V of this report), leads us to conclude that ...").

For anything derived from persons outside the group, the regulations for individual assignments apply.

### "Joint" group assignments shortly

The group as a whole is responsible for the entire contents of the report, even though each member wrote a different component of the assignment.

In that case, it is not necessary to indicate who was responsible for each observation.

Note that when using external sources, the rules for individual assignments apply here as well.

If the student does not follow these regulations and literally copies or paraphrases someone else's work without a proper source reference, they are committing plagiarism.

Both copying without a source reference and allowing one's work to be copied are considered plagiarism/fraud.

During joint group assignments, the entire group can be held responsible for the fraud.

## Rule 9. Regulations in case of an emergency

If there is an emergency or an impending emergency before or during an exam or test, the following regulations apply:

- 1) If there is an expected emergency before the start of an exam or test, the exam or test will immediately be postponed. The examiner will set a new date and time for the exam or test together with the Programme Director.
- 2) The new date and time for the exam or test, which will take place within a month (not including holidays), is binding. It will be announced via the usual channels within three working days after the building has been cleared.
- 3) If there is an emergency or an expected emergency during an exam or test, the following actions must be taken if possible:
  - a) The student has written their name and student number on all exam or test materials at the start of the exam or test;
  - b) The people present must immediately leave the room when ordered by the responsible organisation or examination supervisor;
  - c) The students leave their exam or test in the room;
  - d) If students have had a chance to begin their exam or test, the (partially) completed work will be used by the lecturer to determine the final grade, if it is reasonably possible to do so.

- 4) If the lecturer cannot determine the final grade based on the provisions of article 9.3d, a resit opportunity will be scheduled for the affected students within a month (not including holidays) after the date of the original exam or test, provided that these students had signed up for the initial exam or test.

#### Rule 10. Assessment regulations

- 1) The assessments are usually expressed in the form of one of the following **integer** marks 1 to 10 inclusive. The marks have the following meanings:

1: very poor	2: poor	3: very unsatisfactory
4: unsatisfactory	5: almost satisfactory	6: satisfactory (pass)
7: very satisfactory	8: good	9: very good
		10: excellent

Examinations may also be assessed alphanumerically:

V: Sufficient	O: Insufficient
NVD: Did not complete	VR: Exemption

- 2) When the student has been assessed more than once for the same examination, the highest mark is the valid one.
- 3) Results from other institutions that are included in the student's examination programme with the Examination Board's consent are not translated to the UT's assessment system. If a different assessment system was used (i.e. no grades from 1-10 as outlined in the table in article 12.4), sufficient results are registered as "V" and unsatisfactory results as "O." The scope of the study unit in question is translated into the equivalent number of credits.
- 4) The Examination Board has the option to declare a grade invalid if it was acquired in a manner that violates these regulations.

#### Rule 11. Exemptions

- 1) On the basis of examinations taken elsewhere with satisfactory results, exemption from an examination can be given. The Examination Board decides about the granting of exemptions after it has received advice from the relevant teachers.  
The exemptions from examinations stated in the previous paragraph are determined in a written decision.
- 2) A request for exemption from the requirements to take examinations or to participate in (practical) exercises on the basis of what is determined by or in accordance with the Dutch law should be made to the Programme Director.
- 3) Having heard the relevant examiner(s), the Examination Board decides within one month of having received the request.
- 4) The student has the opportunity to be heard before the Examination Board decides to grant the exemption totally or in part.
- 5) When, by or according to the Dutch law, the examinee has the right to exemption for one or more examinations, he informs BOZ, and provides the relevant pieces of evidence.

#### Rule 12. Graduation with distinction

When, beforehand, there is in the judgement of the Graduation Committee an exceptional level of student achievement and the prove of the student's potential as an exemplary academic engineer, the Examination Board can submit a reasoned proposal to the Programme Director to affix to the master's degree the designation 'with distinction' ('met lof').

This must be requested two weeks beforehand, in order that the degree certificate 'with distinction' can be awarded immediately after the end of the examination. When there is uncertainty about the award, a degree declaration can be handed over, and the degree certificate (with or without 'with distinction') can be received at BOZ within two weeks after the examination.

Apart from the 'exceptional level and potential' the guidelines for passing 'with distinction' are:

- a. The final mark for the master's project is at least a 9;
- b. The unweighted averaged mark of all courses, exclusive of the Master's project, must be at least: 8.00;
- c. The assessments of all examinations of the master's courses, including extra courses, are satisfactory ('Vr', 'V' or a grade higher than 6);
- d. A mark of 6 is gained not more than once in the programme (extra courses are not counted);

- e. The master's examination should have been taken within the nominal study time, augmented when applicable with recognised awards for graduation support, with a maximum over-run of two years. The nominal time is two years for MSc's or two years plus the extent of the pre-master's courses (less the exemptions within the master's programme for HBO-bachelors<sup>1</sup>).

When these conditions are not completely satisfied, the chairman of the Graduation Committee of the student involved can still submit a proposal to the Examination Board for the award of the designation 'with distinction'. The Examination Board makes a decision.

#### Rule 13. Degree certificates

Degree certificates are signed beforehand by the chairman of the Examination Board and after the examination by the graduation professor and the successful candidate.

When no degree can be awarded after the assessment of the graduation project, the degree certificate is signed at the appropriate time by the chairmen of the Examination Board and the graduation professor. The successful candidate signs the degree certificate after he has received it from BOZ.

In the absence of one of the members mentioned above, the following regulation applies:

- a) The degree certificate should be signed by at least one member of the Examination Board.
- b) The Examination Board gives the Programme Director the authority to be the second signer.

#### Rule 14. Final article

As the occasion arises, the Examination Board has the right to deviate from the rules described above. Such a deviation must be made on an individual basis and be substantiated.

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<sup>1</sup> Bachelors from a university of professional education ('hogeschool')