STUDENT CHARTER

MASTER'S PROGRAMME
INDUSTRIAL DESIGN ENGINEERING
2019 – 2020

PREFACE

The Industrial Design Engineering (IDE) programme has chosen to embed the Teaching 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 teaching and examinations. These rules apply to all students, but individual students have the right to submit a request for an alternative programme. Also, the Director of Education can decide to take a general or individual action that deviates from the regulations, provided that it is to the advantage 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 <u>education page</u> of the master's programme in Industrial Design Engineering and, for information about course content, to the <u>Educational</u> Catalogue, whenever necessary.

The Industrial Design Engineering Teaching and Education Regulations apply to all IDE students. The programme is provided within the faculty of Engineering Technology (ET) at the University of Twente (UT) in Enschede.

Prof. dr. G.P.M.R. Dewulf

Dean of the Engineering Technology Faculty

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EDUCATION AND EXAMINATION REGULATIONS

INDUSTRIAL DESIGN ENGINEERING

2019-2020

The Dean of the Faculty,

pursuant to Articles 9.5, 9.15, paragraph 1 sub a, 7.13 paragraph 1 and 2, 9.38, sub b, and 9.18, paragraph 1 sub a, and 7.59 of the Higher Education and Research Act (WHW),

and

in due consideration of the recommendations of the Board of Studies, as well as the approval, or advice, of the Faculty Council as pertaining to the specific appendix of the programme in question,¹

hereby authorizes the Teaching and Examination Regulations of the following educational programme: Industrial Design Engineering (CROHO number 56966).

The right of recommendation relates to Article 7.13 of the Higher Education and Research Act in respect of parts a through g. The right of approval relates to Article 7.13 of the Higher Education and Research Act in respect to other parts.

SECTION 1 GENERAL PROVISIONS

ARTICLE 1 DEFINITION OF TERMS

The terms used in these regulations should be interpreted as having the same meaning as in the Higher Education and Scientific Research Act (WHW), insofar as they are defined in that Act. The following terms and definitions apply to these regulations:

Assessment Committee: Committee which assesses the thesis project assessment;

Admissions Committee: The Admissions Committee is appointed by the Dean pursuant to Article 7.30;

BOZ: Abbreviation of 'Bureau Onderwijszaken' meaning the Office of Education

Affairs of the Faculty of Engineering Technology;

Chairperson: Chair of the Assessment Committee;

Dean: Head of the Faculty of Engineering Technology;

European Credit (EC), a credit of 28 hours as described in the WHW;

EUTS: European Credit Transfer System: European agreements on a system for

expressing student study load; the study load of an academic year is 60

European Credits, or 1680 hours (see Article 7.4 of the WHW);

Examination: A test by which the Examination Board determines whether all interim

examinations of the education units belonging to the programme have been

passed (in conformation with Article 7.10 of the WHW;

Examination Board: The programme's Examination Board is appointed by the Dean in accordance

with Article 7.12a of the WHW;

Examination component: Every component of an examination which is separately assessed, also called

'interim examination';

Examiner: The individual who has been appointed by the Examination Board to hold the

interim examinations in accordance with Article 7.12c of the WHW;

Faculty: The Faculty of Engineering Technology (ET), University of Twente;

Institution: University of Twente (UT);

Interim 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;

IDE: Industrial Design Engineering; in this document, this qualification as preceding,

for example, 'student', 'programme', or 'examination' is often omitted in the interest of readability and sometimes the synonym Industrial Design is used;

Master of Science: The Master of Science programme in 'Industrial Design Engineering' (IDE);

Programme: The Master of Science programme in Industrial Design Engineering, at the

University of Twente;

Programme Director: The Director of Education of the IDE programme;

Student: He who is registered as a student at the University of Twente for the sake of

following education and/or taking examination components and examinations of the Industrial Design Engineering programme, and who has completed the payment of (legally established and required) tuition fees (Articles 7.32 and

7.34, WHW).

Study component: A component of the study programme to which a course code is assigned;

Study year: The time period that begins on 1 September and ends on 31 August in the

following calendar year;

Website: The website www.utwente.nl/ide;

Working day: Monday to Friday inclusive, with the exception of recognised holidays and leave

days and/or holiday periods approved by the UT;

A student has the right to follow education and/or take interim examinations or examinations relating to the programme provided he has satisfied the legal requirements. If a student has not (completely) met these requirements and, at that time, still takes part in the education and/or interim examinations and examinations, this is considered to be an irregularity. In such cases, related student data can be removed from the administrative records and naturally do neither count toward student progress nor for student grants and loans. Additional conditions can be placed on participation in the various education activities and examinations.

SECTION 2 ADMISSION

ARTICLE 2.1 EDUCATIONAL PREREQUISTES

Admission to the programme is granted if the requirements with regard to prior education for enrolment in university education are met, in accordance with the WHW, Articles 7.30b.

Admission to a master's programme can be achieved in several ways:

- a. Graduates from the three Dutch Universities of Technology holding a university Bachelor's degree in Industrial Design are admitted unconditionally.
- b. In many cases, those holding a university Bachelor's degrees in an adjoining subject are admitted on the condition that a specific supplementation of the Bachelor's programme is undertaken (for example, a minor in industrial design) and that a specific graduation specialization is chosen. See also the <u>progression matrix</u>, which is published annually (partly in Dutch). In all these cases, individual variations are possible.
- c. Those holding a university Bachelor's degree from an Industrial Design programme (or adjacent discipline) at a foreign university can be admitted if:
 - i. the university has a good reputation; and
 - ii. the student has a CGPA of at least 75% of the maximum score, or the country's equivalent; and
 - iii. the additional requirements (including the language requirements) are satisfied.
- d. Those who have successfully completed a pre-master's programme are admitted (see Article 4C).

ARTICLE 2.2 ADDITIONAL REQUIREMENTS FOR HOLDERS OF A NON-DUTCH QUALIFICATION

International students must provide the result of an English language test. An Academic IELTS overall band core of at least 6.5, TOEFL Internet-based Test with a score of at least 90 or Cambridge CAE-C (CPE). Exemptions from the language requirement can be found here.

ARTICLE 2.3 PRE-MASTER'S PROGRAMME

- Bachelors from a University of Applied Sciences (HBO) in programmes relevant to the IDE programme, as well as university bachelors in adjacent subjects which do not give direct admission to the master's programme can be admitted to the pre-master's programme. Admission is at the discretion of the Admissions Committee.
- 2. The pre-master's programme consists of a cross-section of courses from the bachelor's programme with an emphasis on those subjects that were absent or lacked depth in the previous education. The details of the (pre-master's) programme depend on the previous education.
- 3. The pre-master's programme for bachelors from related bachelors programmes at a Dutch University of Applied Sciences (HBO) consists of 30 EC.
- 4. Those who successfully complete all study components in the agreed pre-master's programme within twelve months after registering for the pre-master's programme are admitted to the master's programme.
- 5. Students who are unable to complete a pre-master's programme successfully are not re-admitted to a pre-master's programme in a following study year.

ARTICLE 2.4 FOLLOWING OF MASTER'S COURSES BY NON-MASTER'S STUDENTS

- 1. Students who have not obtained the degree of bachelor are not admitted to interim examinations of study components of the master's programme.
- 2. When the situation of the bachelor's students are exceptional and distressing they can request the examination board to take already examinations of courses for the master's programme under certain conditions and allowed by the so called Personal Circumstances Committee (CPO).

SECTION 3 CONTENTS AND THE STRUCTURE OF THE PROGRAMME

ARTICLE 3.1 AIM OF THE PROGRAMME

A) FINAL QUALIFICATIONS

The Master of Science in Industrial Design Engineering can operate in the field of Industrial Design (Engineering) as an interdisciplinary designer.

The graduate is able to recognise the relevant disciplines and aspects such as functionality, technology, aesthetics, use, market and marketing, manufacturing, logistics, consumer, business and sustainability, and is able to integrate these aspects in the development of products. In this context, the word product refers to tangible products as well as to product-related services and systems.

In the process of product development, the IDE graduate:

- Is able to analyse market demands and user needs along with technological and social opportunities;
- Is able to generate a (personal) vision on the design problem;
- Is able to generate and select ideas and design concepts;
- Is able to transfer existing knowledge to new problems and to implement new knowledge;
- Can materialise a concept to the stage of a working model;
- Is able to take into account the market launch and the product life cycle.

The graduate is an academically educated designer. He is able to use scientific methods and techniques in the development of products and in research. He is able to contribute to research projects and to the development of new knowledge. He possesses knowledge and skills in relevant disciplines and sciences, and is able to use them in his reasoning in and when reflecting methodologically on the process of development.

The graduate is talented, self-directed, responsive, creative, is able to further develop his own knowledge and skills, is able to develop his own signature, is able to deal with limited certainties, can communicate, can document, visualise and present his design, can structure his projects, can function both individually as well as in a multidisciplinary team and within an international context.

IDE graduates find employment as industrial designer, product designer, product engineer, design engineer, design product manager, product manager, interaction designer, researcher, usability consultant, design-centred researcher, strategic designer, brand manager, product development project leader, innovation consultant, and design-brand consultant.

ARTICLE 3.2 STRUCTURE OF THE PROGRAMME

A) CONTENT OF THE PROGRAMME AND THE ASSOCIATED EXAMS

Each study year is divided into four quarters. The first five quarters of the programme consists of courses. The courses must be fully completed before the thesis project can be started. Many courses are completed with a project or with an oral examination.

- 1. The study load of the educational programme Industrial Design Engineering encompasses 120 EC and the programme is concluded with the master's examination; see Appendix 2.
- 2. The following forms of education are used:
 - Assignment/ project: Execution of a design or research project;
 - Essay: Written report about a theoretical or practical project/assignment;
 - Lecture: Plenary meeting for the students which is intended to convey information;
 - Literature study: Undertaking literature research into specified scientific phenomena;
 - Practical: Participation in a practical education activity designed to master certain skills, such as completing written work or a prototype design, carrying out of tests and experiments, and participating in field work or an excursion;
 - Placement: Carrying out activities in order to increase insight into company processes, as an intern at a company or in a scientific environment;
 - Seminar: Meeting for a subgroup of the population which offers students the opportunity to work through the teaching materials (also supervised independent study).
- 3. Each student composes his own programme within the boundaries of the programme constraints as laid down by the Examination Board. The student selects core subjects from the IDE programme, of which one part per track is compulsory. There is sufficient space for following several specialist courses in the domain of the thesis project, if necessary. In addition, the student can take the initiative to emphasise (elements of) both depth and breadth in his programme. The thesis project (45 EC) is the master's examination and the endpoint of the programme.

The master's programme for an individual student cons	sists of: EC
Core courses Compulsory for all students in the track or stro	10 - 50 ongly recommended
courses offered by other tracksb. Specialist courses as preparation for the thesisc. Electives (personal accent, in-depth or in-bread	• •
d. Thesis project	45
Total for the master's programme (minimum)	120

The programme is put together in close consultation with the track coordinator or a lecturer authorised to represent the track coordinator.

- 4. Composition of the student's programme
 - a. The student puts together a programme in close consultation with the track coordinator. The programme composition is considered final after it has been approved by the student, the track coordinator and the Director of Education.
 - b. The programme must be approved and submitted to the Office of Education Affairs (BOZ).
 - c. A form published on Canvas must be used to provide the required information.

d. If the student wishes to make changes to one or more examination components for which approval has already been granted, he can submit a request to that end to the relevant track coordinator.

5. Internationalisation

The incorporation of international courses or projects into the study programme requires the prior approval of the track coordinator and the Director of Education. It may concern a company placement, a placement at a university or scientific institution, a thesis project and/or a number of regular courses at a foreign university. Subsidy regulations are in place that allow a student to claim reimbursements for (part of) the extra costs made for this specific purpose, but not more than once during the student's programme; see the <u>subsidy regulations</u>.

The procedure for an internationalisation programme is as follows:

- a. If it includes international courses, the student supplies the necessary course information with his request, on the basis of which the track coordinator can determine the level and extent of the course(s).
- b. No international courses may be included that substantially overlap with regular UT courses that have already been completed or which still have to be completed.
- c. The track coordinator determines the number of EC. Starting point for this are the agreements within the framework of the ECTS (European Credit Transfer System).
- d. The maximum number of study credits for international courses and projects is 30 EC. The surplus of courses can be listed as 'extracurricular courses' in the transcript supplied with the degree certificate.
- e. The maximum number of study credits from other institutions is not applicable if the institution is part of an institutionalised collaboration with the programme or Faculty.
- f. The Director of Education approves the request.

6. Thesis project

a. The maximum duration of the project is 16 months, unless agreed differently between the involved parties (student, UT, external organisation) prior to the project. This means that if the graduation report is not handed in and accepted within this period, the project will be assigned the mark 'unsatisfactory'. The student must then carry out a new project in order to be able to graduate.

b. Assessment Committee

- At a time agreed with the chairperson, the student must submit a request to form an Assessment Committee to the chair.
- The chairperson ensures the formation of this committee within four weeks
 after the student's request. The Office of Education Affairs submits the
 composition of this Assessment Committee to the Examination Board, for
 approval.
- c. Reporting and completing of the thesis project (also see rule 9 of the regulations of the examination board)

The results of the project are documented in a report, which must be completed at least two weeks before the date of the presentation. The assessment of the thesis project is further based on:

- A presentation (colloquium) in public of not more than one hour, announced timely and taking place at the UT, preferably in the building of the Faculty of Engineering Technology;
- A closed session of the Assessment Committee with the student, which generally occurs immediately after the presentation. By mutual consultation,

it can be decided to conduct the cross-questioning prior to the colloquium. The final mark for the master's examination is determined at the end of this session.

- The Assessment Committee determines whether all the requirements for the master's examination have been satisfied pursuant to Appendix 2.
- d. Completion of the thesis project at another university
 In deviation from what is stated in c above, a student may present his colloquium at another university (for example because it is where daily supervision took place), provided that:
 - The responsible chairperson (of the UT) gives his permission.
 - The relevant university has a structural collaboration agreement with the IDE programme of the UT.
 - At least one authorised examiner of the IDE programme of the UT will be present at the colloquium.

Either the protocol in place at that university or the UT protocol may be followed. The mark determined for the master's examination is accepted compulsorily. The Assessment Committee of the UT determines whether all the requirements for the master's examination have been satisfied pursuant to Appendix 2.

B) SPECIALIZATION CONTENT

The Master of Science programme makes up the last two years of the industrial designer's education. The bachelor's programme covers the fundamental principles of the broad domain of industrial design. In the bachelor's programme, the emphasis is on making knowledge applicable and on using specific knowledge to arrive at more generally applicable solutions or ways of working, and on the development of learning abilities. The red thread running through the bachelor's programme is the integration of knowledge from different domains. In the master's programme, the students' skills are further developed and their knowledge deepened. This deepening cannot be achieved across the complete breadth of the subject. Therefore, the following specializations are offered:

Human Technology Relations (HTR)

The focus is on the exploration and design of products that serves the problems and aspirations of people on an individual, social or societal level. One can consider Industrial Design Engineering the discipline that makes technology available for users, since a sole technology, like 'a lab on a chip' is not graspable for people. In order to solve diseases or monitor blood sugar levels for people that suffer from diabetes, such a technology needs an interface to the world of the patient. In the master track Human Technology Relations, one learns to design this connection between people and technology from a people oriented perspective.

Emerging Technology Design (ETD)

The master track Emerging Technology Design teaches students how to introduce new technologies into the consumer market instead of introducing a technology for a single, specific product. In this way technology that is expensive because of its limited field of applicability can become cheap because it is adapted for mass production. On the other hand, consumer products can be modified and or new products can be brought to market because new technologies make it possible to produce new shapes (hydroforming) or cheaper (fewer parts due to friction stir welding) or more advanced (fuel cells, reduced sound). Another goal of this track is to decrease the distance between the research environment and the industry and market.

Management of Product Development (MPD)

An Industrial Design Engineer often acts as the linking pin in product development trajectories; simultaneously analysing, directing, coordinating, conducting and contributing to the project. Such projects are ordinarily embedded in multi-disciplinary environments. Therefore, industrial design engineers require adequate information, knowledge and skills to govern the development cycle, to interrelate different projects and ensure alignment to company strategies. Often, they cannot—nor want to—become specialists in all distinct fields.

However, they should be capable of initiating, coordinating and governing the interactions between all parties involved. The master track Management of Product Development aims at acquiring this expertise. Although the focus is on the rationale of the methodologies and the working methods, thorough attention to the quality of the resulting product is inherent. The master track concentrates on the full breadth of the product development cycle. It emphasizes the aspects that play a role in the different phases, rather than focusing on the exact and specific completion of those phases.

The specializations give room for not only the subject-specific depth and the relevant research but also for the development of the specific competencies that are vital for the sub-domain. Within the master's programme, part of the education is aimed at all master's students, while the accent specific for a certain track is achieved by way of special projects. The thesis project (master's thesis) is carried out under the responsibility of one of the research groups of the Faculty. In this project, the student shows that he is in a position to make a contribution toward broadening of his subject-specific knowledge in that part of industrial design.

C) KNOWLEDGE, INSIGHT AND SKILLS

Article 4 lists the levels of knowledge, insight and skills that the student is expected to have achieved upon completion of the programme.

D) STRUCTURE OF PRACTICAL EXERCISES

The educational programme for Industrial Design Engineering consists of a number of practical exercises in the form of design projects. Practical exercises can also be a part of a course that is completed with a written or oral examination.

Usually, the opportunity to participate in a project or practical is offered only once per year. If – for reasons beyond his control – a student has not been able to participate in a project or practical in accordance with the regular schedule, the Examination Board will try – to the best of its ability – to enable the student to still carry out the project or practical.

E) SEQUENCE OF THE INTERIM EXAMINATIONS

There are no requirements for prior attendance or participation in order to follow education components that take the form of lectures or plenary meetings, unless determined otherwise beforehand.

- a. Enrolment may be required for participation in seminars (supervised independent study). Moreover, preparation and regular participation is assumed. If it appears that this requirement is not being met, or insufficiently being met, a student can be excluded from participation.
- b. General requirement for admission to participation in practicals and projects is that previous study components or study phase(s) have been successfully completed. Furthermore, there is the requirement to be present and participate actively. Practicals and projects can only be completed with a satisfactory result if all prescribed project(s) have actually been carried out within the prescribed period.
- c. For admission to participation in theory courses, the general requirement is that previous study components that prepare for the relevant course have been satisfactorily completed (see Osiris).

Not participating in education in a term may result in failing interim examinations, projects or practicals. The programme takes no responsibility for this whatsoever. In cases beyond a student's control (force majeure; for example ill health), the student should immediately contact the lecturer who is responsible for the missed component of education.

F) NATURE OF THE PROGRAMME

The master's programme Industrial Design Engineering is only provided as a full-time programme.

G) QUALITY ASSURANCE

The Director of Education 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'.

H) DIFFERENCES BETWEEN BACHELOR'S AND MASTER'S GRADUATES

The differences between the bachelor's and master's graduates are found in orientation and level. Typically, the master graduate is able to apply knowledge in new, non-standard situations, tackle more complex and ill-structured problems, work more independently and more autonomously, deepen knowledge and develop skills more independently, plan and perform scientific research and adjust the approach to the demands of the situation, communicate more convincingly and unambiguously, and perform more professionally.

LEARNING OBJECTIVES

On the basis of the profile for the IDE programme, seven areas of competencies of the university IDE graduate are distinguished:

- a. The IDE graduate is competent in designing.
 A University IDE graduate can realise new or modified artefacts, products or systems, with the aim of creating value in accordance with predefined needs and requirements.
- The IDE graduate is competent in the relevant IDE disciplines.
 A University IDE graduate is familiar with contemporary knowledge and has the ability to increase and develop this through study.
- c. The IDE graduate is competent in research. A University IDE graduate is able to acquire new scientific knowledge through research. In this respect, research entails the development of new knowledge and insight according to purposeful and systematic methods.
- d. The IDE graduate takes a scientific approach.

 A University IDE graduate has a systematic approach characterised by the development and use of theories, models and coherent interpretations, has a critical attitude and has insight into the nature of science and technology.
- e. The IDE graduate has basic intellectual skills.
 A University IDE graduate is able to adequately reason, reflect and form a judgment. These abilities are acquired or refined within the context of a discipline, and then become generically applicable.
- f. The IDE graduate is competent in cooperating and communicating. A University IDE graduate is able to work with and for others. This not only requires adequate interaction and a sense of responsibility and leadership, but also the ability to communicate effectively with colleagues, clients, (end-)users, suppliers, experts and laymen. He is also able to participate in a scientific or public debate.
- g. The IDE graduate takes the temporal, social and personal context into account.
 Science and technology are not isolated, and always have temporal, social and personal contexts. Beliefs and methods have their origins; decisions have social consequences in time.
 A University IDE graduate is aware of this, and has the competence to integrate these insights into his scientific work.

ARTICLE 3.3 THE PROGRAMME'S LANGUAGE OF TUITION

- 1. The education and its examination components take place in English.
- 2. If neither the examiner not the examinee objects to it, the examination component can be taken in another language.
- 3. The graduation report can be written in English or in special occasions in Dutch. Permission must be obtained beforehand from the Examination Board. If the report is written in Dutch, a summary in English is required.

SECTION 4 TEACHING AND ASSESMENT

ARTICLE 4.1 REGISTRATION, WITHDRAWING REGISTRATION, FREQUENCY AND PERIODS

- 1. There will be an opportunity at least twice a year to sit written or oral interim examinations. Practical exercises can be completed at least once per year.
- 2. There is at least one opportunity to sit an interim examination at the end of the period in which the applicable study component has been taught.
- 3. In contradiction with what is laid down in Paragraph 1 of this article, an opportunity to take an interim examination for a study component that is part of the degree programme, but which was not taught during that particular academic year, shall be offered at least once per academic year.
- 4. In certain cases, the Examination Board can deviate from the number of times or the manner in which interim examinations can be taken.
- 5. The interim examination timetable for that semester is published at least one month before the start of the semester and contains the dates and times of the interim examinations.
- 6. The Dean must approve any changes to the interim examination schedule. Students will be informed of any changes. The Programme Director must inform the Examination Board of these changes during the next interim examination meeting.
- 7. Students are required to register for written interim examinations via OSIRIS
- 8. Should a student fail to register before the close of registration for an examination, they will lose the right to take that particular interim examination.
- 9. A student can withdraw from an interim examination no later than the day before the interim examination in question.
- 10. Should a student fail to appear for an interim examination for which he registered via OSIRIS, and from which he failed to withdraw in time (in accordance with Paragraph 11), this will be recorded in OSIRIS as a fail. This will count as an unsuccessful interim examination attempt as meant in Article 3.

ARTICLE 4.2 TYPES OF EXAMINATIONS

- 1. A study component is completed with an interim examination. An interim examination can be of one of the following types:
 - A written interim examination;
 - An oral interim examination;
 - A series of tests;

- The assessment of practical exercises as meant in Article 1;
- A combination of the above.
- 2. The Examination Board of the relevant programme must publish the following programme details at least two weeks before the start of the teaching period:
 - The interim examination requirements (in any case which material is to be tested);
 - Further information concerning the method of examination;
 - The weight of a particular interim examination for the final result of a series or combination of interim examinations.
- 3. The information in Article 3.2 is always published in the electronic learning environment (Canvas) of the study component in question.
- 4. Students have the right to view model interim examination questions, practice interim examinations or representative previous interim examinations, and the relevant answers, as well as the assessment standard for the interim examination in question.

ARTICLE 4.3 ORAL EXAMINATIONS

- 1. Oral exams are taken in public, unless the Examination Board decides otherwise due to extraordinary circumstances.
- 2. A student or examiner who wishes third parties to be present during an oral interim examination must inform the Examination Board at least ten working days prior to this interim examination.
- 3. If the Examination Board has determined that members of the Examination Board (or an observer representing the Examination Board) must be present during an oral interim examination, this is made known to the examiner and the student at least one working day prior to the interim examination.

ARTICLE 4.4 PERIOD OF VALIDITY

- 1. A successfully completed study component is valid for a term of six years.
- 2. A student can submit a request to the Examination Board for an extension of the validity of a result as meant in Paragraph 1. The Examination Board may not refuse this request without a valid reason. The Examination Board will provide a written justification if it turns down such a request.
- 3. The results of interim examinations that are part of a series or combination of interim examinations are valid only during the academic year in which they are achieved. The examiner of the study component may determine an alternative arrangement. In this case, the examiner will inform the Examination Board. The alternative arrangement must be made known via the electronic learning environment (Canvas).

ARTICLE 4.5 REGISTRATION AND PUBLICATION OF THE RESULTS

- 1. The result of a written interim examination or practical exercise is published via OSIRIS within twenty working days.
- 2. The result of an oral interim examination is made known to the student within one working day in the form of an authorised proof of result provided by the examiner.
- 3. The provisions of Paragraph 2 do not apply if the oral interim examination is part of a series of oral interim examinations of the same study component, which take place on more than one day. In that

case, the examiner determines the result within one working day after conclusion of the series of oral interim examinations.

- 4. If the result of a study component is based on the completion of one or more assignments, papers or theses, then the date of submission of the final assignment, paper or thesis will count as the interim examination date.
- 5. Should the examiner be unable to meet the deadline as described in Paragraphs 1 and 2 owing to extraordinary circumstances, he will report this, with reasons, to the Examination Board. The Examination Board will inform the student of the delay as soon as possible by and also communicates the new time period within which the result will become available. If the Examination Board is of the opinion that the examiner has not met his obligations, it may appoint another examiner to ascertain the result of the interim examination.
- 6. If a second interim examination opportunity is planned shortly after the first, the results of the first interim examination will be published at least ten working days prior to the second interim examination.
- 7. Students can request a certified study progress overview from the Student Services Desk if required.
- 8. If a student receives more than one authorised result for the same study component, the highest result will apply.

ARTICLE 4.6 RIGHT OF INSPECTION AND DISCUSSION

- 1. Students have the right to hear a justification of the results of an interim examination from the examiner. If there is no collective review of the results, a student may submit a request for an individual discussion of the results to the examiner within two weeks of publication of the interim examination results. This discussion, or a collective review, must be held within five weeks of publication of the interim examination results. After this term of five weeks, the student will no longer have the right to a discussion of the results of an interim examination and a justification of the assessment by the examiner.
- The examiner responsible for the assessment of a student's written interim examination is also
 responsible for ensuring that this work is kept on file in the administration of the relevant chair or
 department for at least two years following publication of the results. The student has the right of
 access to this work during this term.
- 3. The Examination Board may permit deviations from the provisions of Paragraphs 1 and 2.

ARTICLE 4.7 EXEMPTION FROM AN INTERIM EXAMINATION OR PRACTICAL EXERCISE

- 1. The Examination Board can, at a student's request, grant that student an exemption from an interim examination or practical exercise. If applicable, the examiner in question may be consulted first.
- The grounds under which the Examination Board can grant an exemption from a specific interim
 examination pertain solely to the level, content and quality of interim examinations or tests previously
 taken by the student, or knowledge, insight and skills acquired by the student outside of the sphere of
 university education.
- 3. Students may also be exempted from assignments or practical exercises by the Examination Board if they can demonstrate that a specific assignment or practical exercise, or the execution of such assignment or exercise, will likely present them with a moral dilemma. In such a case, the Examination

Board decides whether the practical exercise or assignment can be carried out in another manner to be determined by it.

SECTION 5 FINAL DEGREE AUDIT

ARTICLE 5.1 FLEXIBLE PROGRAMME

- 1. As an exception, approval can be given to the taking of a Master's examination on the basis of a programme of examination components composed by the student.
- 2. The Examination Board determines whether the 'free' programme is actually built upon education components that 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 Paragraph 2 of this article relates to both the programme of courses and to the thesis project.
- 4. If the Examination Board does not approve the proposal which has been submitted, it must give clear reasons for its decision.

ARTICLE 5.2 PROGRAMME EXAMINATION

- 1. The programme Industrial Design Engineering has a master's examination.
- 2. The master's programme Industrial Design Engineering has a study load of 120 EC.

ARTICLE 5.3 PERIODS, FREQUENCY OF EXAMINATIONS AND ISSUING OF CERTIFICATES

A) APPROVAL OF THE RESULTS OF THE EXAMINATIONS

- 1. After all components of an examination have been taken, the Examination Board can determine whether or not the student has satisfied the conditions for passing as stated in Appendix 2.
 - If the conditions have been met, the Examination Board can declare the student to have passed, and can carry out (or have carried out) all the relevant subsequent procedures.
- 2. Moreover, if the guidelines for the award of the designation 'with distinction' as stated in the 'Examination Board Regulations' have been satisfied, the Examination Board can allow this designation to be used on the master's degree certificate.

B) DEGREE CERTIFICATES AND REGISTRATION

- To show that the master's examination has been successfully completed, a degree certificate is awarded by the Examination Board. The degree certificate is signed by the persons listed in Appendix
 The award ceremony takes place in public; in special circumstances, the Examination Board can deviate from this.
- 2. An English language diploma/degree supplement and/or transcript, on which the results of the examination components are stated, is provided to all candidates who have undertaken the exams.
- 3. The components belonging to the examination are listed on the reverse side of the degree certificate or on the transcript. Extracurricular components are listed where applicable, provided these were added to the study programme with the approval of the Programme Director. Any listed

extracurricular components are not part of the degree programme. All listed components must have been completed satisfactorily; components that have not been completed satisfactorily will not be listed.

ARTICLE 5.4 DEGREE

Participants who have successfully met all requirements for the master's examination are awarded the Master of Science (MSc) degree.

ARTICLE 5.5 DOUBLE DEGREE

The programme Industrial Design Engineering provides the opportunity to complete a double master degree with a related programme of the University of Twente. The following requirements apply:

- a) the student must be admissible to each of the master's programmes; and
- b) the student must meet the requirements of each of the master's programmes; and
- c) the total duration of the double master degree is 180 EC and must consist of a combined master assignment of 60 EC; and
- d) the programme must be approved by the examination committees of both programmes.

THE PROGRAMME MUST BE APPROVED BY THE EXAMINATION COMMITTEES OF BOTH PROGRAMMES. SECTION 6 STUDENT GUIDANCE

ARTICLE 6.1 STUDENT GUIDANCE

The Dean is responsible for student supervision, which includes informing the student of study opportunities within and outside the programme. The Dean has delegated the tasks of student supervision to the Programme Director of the programme. The implementation is performed by the track coordinators and study advisers.

ARTICLE 6.2 STUDYING WITH PERSONAL CIRCUMSTANCES

For more information regarding studying with personal circumstances please check the <u>regulations</u> on the website.

SECTION 7 AMENDMENTS, TRANSITIONAL ARRANGEMENTS, APPEALS AND OBJECTIONS

ARTICLE 7.1 CONFLICTS WITH REGULATIONS

If other additional regulations and/or provisions pertaining to teaching and/or examinations conflict with these Teaching and Examination Regulations, the present Teaching and Examination Regulations take precedence.

ARTICLE 7.2 ADMINISTRATIVE ERRORS

If an error is discovered following the publication of an interim examination result, a marks sheet, or an overview of a student's progress, the discoverer, whether the university or the student, must make this known to the other party immediately upon finding the error, and to cooperate in the rectification of the error.

ARTICLE 7.3 AMENDMENTS TO REGULATIONS

1. Amendments to these Teaching and Examination Regulations are declared 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 be applied to the current academic year if in all reasonableness these changes are not expected to prejudice the students, or in situations of force majeure.
- 3. Amendments to these regulations have no effect on earlier decisions of the Examination Board.

ARTICLE 7.4 TRANSITIONAL ARRANGEMENTS

- 1. In the event of an amendment to the Teaching and Examination Regulations, the Dean may implement a transitional arrangement with a predetermined period of validity.
- 2. The transitional arrangement will be published on the concerned programme's website.
- 3. The following are the points of departure with regard to a transitional arrangement If a degree programme is changed:
 - a. Changes to a degree programme are published before the start of the academic year in which they are implemented.
 - b. No guarantee can be given that all the study components of a programme will actually be taught in the degree programme, as they were defined at the time of a student's registration for a programme.
- 4. In any event, such a transitional arrangement shall include the following:
 - a. An explanation of which discontinued study components are equivalent to which study components, or parts thereof, in the changed degree programme;
 - b. The information that if a study component that does not involve any practical exercises is removed from a programme, students are to be given two opportunities in the following academic year to take the related interim examination, either orally or in writing, or to undergo a different form of assessment.
 - c. The information that if a study component that involves practical exercises is removed from a programme, and if during that academic year no opportunities are offered to carry out these practical exercises, at least one study component is designated to replace the discontinued study component;
 - d. The period of validity of the transitional arrangements.
- 5. The stipulations in Article 4 of a transitional arrangement must be approved by the Examination Board.
- 6. In exceptional cases, and if this is to the student's advantage, the Examination Board may allow a deviation from the number of times and the way in which interim examinations for a discontinued study component may be taken.

ARTICLE 7.5 ASSESSMENT OF THE EDUCATION AND EXAMINATION REGULATIONS

The Programme Director, acting on behalf of the Dean, is responsible for the regular review of the Teaching and Examination Regulations. He monitors, and if necessary adjusts, the study load resulting from individual courses as well as the study load distribution.

Pursuant to Article 9.18 of the WHW, the Board of Studies is responsible for issuing an advice on the Teaching and Examination Regulations as well as the annual assessment of the manner in which the Teaching and Examination Regulations are executed.

ARTICLE 7.6 APPEALS AND OBJECTIONS

An appeal against a decision made by the Examination Board or an examiner, and objections to decisions made by the Dean on the basis of these regulations, must be submitted in writing to the Objections, Appeals and Complaints Desk at Student Services within six weeks of notice of the decision.

ARTICLE 7.7 HARDSHIP CLAUSE

The Examination Board or the Programme Board may allow derogation from the provisions of these Regulations in the event of demonstrably compelling unreasonableness or unfairness. These Regulations define which Board has the authority to derogate.

ARTICLE 7.8 PUBLICATION

The Education and Examination Regulations and the Examination Board Regulations are to be published on the website of the programme in question.

ARTICLE 7.9 ENTRY INTO FORCE

These regulations enter into force on 1 September 2019 and replace the regulations of 1 September 2018.

APPENDICES

APPENDIX 1: PROCEDURE FOR MASTER'S EXAMINATION, COLLOQUIUM AND AWARDING THE DEGREE

The programme can proceed to awarding the Master's degree certificate when the student has satisfied the following requirements:

- Well before graduation, the student contacts the chairperson in order to determine the Assessment Committee, graduation date and room (commonly, via the Department's secretary); see also the Graduation Handbook and/or the relevant graduation regulations within the Department.
- 2. The student ensures that the form 'Register Master's degree' and the colloquium form, countersigned by the chairperson, are handed in to the Office of Education Affairs (BOZ) four weeks (20 working days) before his examination.
- 3. The Office of Education Affairs (BOZ) then sends the student (with a copy to the chairperson) an e-mail with the study data of not-yet-completed study component(s), with the request to check these data, and if necessary correct them (change, delete and/or add courses), within a week.
- 4. Immediately thereafter, the Office of Education Affairs checks all study data and where applicable, the submitted proposals for changes.
- 5. The marks for all courses, with the exception of the mark for the thesis project, must be handed in to the Office of Education Affairs three weeks before the examination.
- 6. If all requirements for passing have then been satisfied, the Office of Education Affairs registers the student as a new graduate with Student Services; this must be done in writing by the Office of Education Affairs two weeks before the examination.
- 7. The student ensures that at the time of the last interim examination, he is enrolled in the programme of the UT.
- 8. Student Services checks whether the student has satisfied all (registration) requirements.
- Every Tuesday, staff from the Office of Education Affairs visits Student Services to authenticate (with embossed stamp) and at the same time register all the relevant degree certificates for the examinations taking place in the following week;
- 10. About one week before the examination, the student submits the report of the thesis project to the Office of Education Affairs (BOZ), in digital form, and preferably by e-mail (and in Word or PDF format).
- 11. If and when the above rules have been satisfied, the examination can be taken, and in principle, if successful, the student can subsequently sign and receive the degree certificate which has been signed by the Dean and the chair. The English-language degree/diploma supplement is supplied at the same time.

In exceptional circumstances, such as large numbers of graduating students or vacations in the months of July and August, the Office of Education Affairs may not be able to provide the degree certificate in time to be awarded immediately after the colloquium. The degree certificate can then be received at a later time as arranged by the Office of Education Affairs or the department.

12. After the final mark of the examination has been given to the Office of Education Affairs and processed, the Office of Education Affairs sends the transcripts (in Dutch and in English) to the graduate as soon as possible.

In exceptional circumstances, if condition 5 has not been met, the thesis project (colloquium and crossquestioning) can be carried out, subject to the approval of the Director of Education. If the project has been successfully completed – and after all requirements for the examination have been satisfied – the degree certificate, supplement and related transcripts can be collected in person at the Office of Education Affairs. In such a case, the degree certificate is signed by the Dean and the Director of Education in advance.

All the forms mentioned above can be obtained from the Office of Education Affairs or can be downloaded from the IDE website.

APPENDIX 2: ASSESSMENT OF THE MASTER'S EXAMINATION

- a. In the assessment of the thesis project, it is determined whether the candidate satisfies the aims of the programme. The aspects of assessment are the following:
 - The level of the content of the work undertaken in the light of the aims of the programme, and the aims of the graduation specialization;
 - The demonstrated academic competencies and engineer's skills (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 the oral presentation, the report (thesis), the defence, the quality of research or design content and the quality of process, project management and organisation. Marks for each component are used to substantiate decisions and for giving feedback. The final mark is not the average of the marks of the components.
- c. In the case of a complete and regular master's programme, the student passes if the following conditions have been satisfied:
 - The assessment of the thesis project is satisfactory;
 - All marks are 6 or higher, 'exempt' (VR) or 'completed' (G).

APPENDIX 3: AUTHORITY TO SIGN DEGREE CERTIFICATES AND STATEMENTS

Master's degree certificates

These are signed beforehand by the chairperson of the Examination Board and after the master's examination by the graduation lecturer and the successful candidate.

If no degree certificate can be awarded after the assessment of the thesis project, the certificate is signed at the appropriate time by the Dean and the Director of Education. The successful candidate signs the degree certificate after he has received it from the Office of Education Affairs.

In the absence of one of the members of UT mentioned above, the following regulations apply:

• The degree certificate should be signed by at least one member of the Examination Board.

The Examination Board authorizes the Director of Education as the second signatory.

EXAMINATION BOARD: REGULATIONS AND GUIDELINES

INDUSTRIAL DESIGN ENGINEERING (MASTER)

2019-2020

(BOZ-IO/ex/19.0042)

RULE 1 THE EXAMINATION BOARD

- The authority of the Examination Board extends to all education components part of the student's education.
- The Examination Board consists of at least three members, including two professors.
- The Examination Board consists of members of the tenured academic staff involved in teaching in the concerned programme(s). One member of the Examination Board is an external expert; that means someone from outside the educational programme.
- For every exam, the Examination Board assigns one or more examiners. If there are two or more examiners, one examiner will be responsible.
- Examiners are members of the academic staff who are responsible for the IDE education as well as professionals from outside the UT.
- The Examination Board can be advised by employees of the education, for example the Director of Education and/or student advisors. They have a consulting voice in the meetings of the Examination Board.
 - The Examination Board can decide to delegate its powers to the chair or secretary and to delegate execution to the management of education, i.e. the Director of Education.
- The meetings of the Examination Board are closed.

RULE 2 AUTHORISATION FOR INTERIM EXAMINATIONS

- 1. The Examination Board compiles a list of examiners for courses and thesis project examinations. In general, the person responsible for an educational component is also the person responsible for the assessment of the exam(s) for that specific educational component. The Examination Board applies the following criteria:
 - Tenured or temporary employees of the UT having obtained the University Teaching
 Qualification (UTQ) and who are involved in IO/IDE education are authorised to conduct
 interim examinations.
 - b. A staff member's authority is restricted to his or her expert domain.
 - c. An examiner's authority extends to all educational levels below the educational level of that examiner.
 - d. Staff members of partner institutions are also authorised if they meet the requirements described above.
 - e. In all other cases, the Examination Board decides whether someone is authorised to conduct interim examinations. This decision also concerns the period of validity and expert domain.
- 2. The Assessment Committee (for the thesis project) consists of at least three members authorised to conduct thesis project assessments:
 - a. One of the professors from the relevant department is chair of the Assessment Committee.
 - b. If no full professor appears to be available, the Examination Board can nominate another member of the scientific (academic) staff.
 - c. At least one member is from the tenured academic staff of the UT outside the department, chair or section at which the student does his or her graduation work.
 - d. In exceptional circumstances, the Examination Board can invite a professor from outside the Faculty to function as chair of the Assessment Committee.
 - e. The chair of the Assessment Committee can invite others as experts to attend the interim examination session as guests. Guests have no voting rights.
 - f. Members of the Examination Board and the Director of Education are always entitled to attend sessions of closed interim examinations.

- 3. The following persons are authorised to conduct thesis project assessments:
 - a. Members of the tenured academic staff of the UT;
 - b. Members of the tenured academic staff of partner institutions of the Faculty or programme;
 - c. Members of the temporary academic staff and general personnel of the UT who have been given the appropriate authority.

The Director of Education annually approves, after consultation with Human Resources and subsequent consultation with the Examination Board, the list of persons in Engineering Technology who are authorised to conduct interim examinations. The list contains the names of all members of personnel who are authorised to conduct interim examinations for the coming academic year. New academic staff must have taken part in two thesis project assessment sessions as observer to becoming eligible for authorisation to conduct thesis project assessments.

4. If a member of the Assessment Committee is unable to attend an interim examination session, he or she can be replaced by a member having authorisation to conduct interim examinations (see 2.3). The substitute should identify himself or herself as such to the chair before the meeting. The substitute has the voting rights of the member he or she replaces.

RULE 3 BASIC PRINCIPLES OF THE EXAMINATION BOARD

- 1. The Examination Board may provide the examiners with directives and instructions regarding the evaluation of the examinee and regarding the assessment of the results of an exam.
- 2. In a number of cases, in which the Education and Examination Regulations that explicitly stipulates, the Examination Board has the authority to depart from the Education and Examination Regulations. The Examination Board will ask supervisors for advice concerning decisions needing to be taken regarding individual students. Student information will be treated as strictly confidential.
 - a.
- 3.
- 4. Regarding the right of ownership of the results of tasks, assignments and projects, The Dutch Copyright Law (Auteurswet) applies (see appendix 4).

RULE 4 FORMULATION AND FORM OF EXAMS, METHOD OF EXAMINATION

- 1. The questions and answers (examination scripts) of an interim examination do not go beyond the sources from which the course materials have been taken and what has been covered in the lectures. These sources are published in an outline before the start of the education that is given in preparation for the relevant interim examination. At the latest, one month before the interim examination, the final extent of the course materials is made known in writing (e-mail/Canvas). The manner in which the interim examination is to be taken must be published when the registration period in the Study Information System (Osiris) opens.
- 2. Before a written interim examination takes place, at least one qualified staff member (according to the UT's new qualification system) assesses the following:
 - a. The exam is representative with regard to what was taught in the course.
 - b. The questions are unambiguous.
 - c. The degree of difficulty matches the education received by the students.
 - d. The length of the exam is appropriate in relation to the examination time.
- 3. The assessment of every interim examination component is stated in the Study Information System (Osiris).
- 4. At a student's request, the Examination Board can allow an exam to taken in a different way than as stated in the Study Information System (Osiris).

RULE 5 WRITTEN AND ORAL INTERIM EXAMINATIONS

- 1. Durations of (written and oral) exams:
 - a. The maximum duration of a written exam is 3 hours.
 - b. The maximum duration of an individual oral exam is 1½ hours.
 - c. The maximum duration of an oral exam in groups is 4 hours.
- 2. The assessment of a written exam makes use of predefined standards (correction model) for the various assignments of the interim examination.
- 3. The maximum number of points that can be gained per assignment/question is published on the interim examination paper the students receive.
- 4. If during and after the interim examination, the assessment concerning the feasibility, lack of ambiguity, and degree of difficulty of the examination turns out to be incorrect, the examiner will report this to the Examination Board as soon as possible. The Examination Board is authorised to adjust the standards. These new standards may not be at disadvantage of the students
- 5. At least two examiners are present during any oral interim examination that has more than two examinees at the same time.
- 6. Oral interim examinations do not take place in public, unless the relevant Examination Board or examiner has determined otherwise, such only in special circumstances.
- 7. Members of the Examination Board or the Director of Education are entitled to attend any oral interim examination session or to have him/herself represented by an observer.

 The role of the observer is explained to the exam students.

RULE 6 ORDER AND PROCEDURE FOR WRITTEN EXAMS

The outline below describes the rules and regulations for written interim examinations in the Master's programme of IDE.

- 1. Before an interim examination:
 - a. Registration for all exams must be done using Osiris (or Canvas if so indicated). Students are responsible for a timely registration.
 - b. Students only have the right to participate in the exam after registering (in Osiris for an exam or course). This ensures a sufficient number of exam questions and places in the hall.
 - c. Students can be checked against the registration list upon entering the hall. Students must also be able to identify themselves with their student ID. Student not registered can be refused admission to the hall. Exam papers of students who did not register will not be assessed.
 - d. Students must leave bags and jackets at the front of the exam hall.
 - e. Students will not be admitted to the exam after the first student has left, or if a student is more than half an hour late. If a student arrives too late, they lose their right to take part in the exam.
 - f. One or more supervisors are appointed for any written interim examination, ensuring that the interim examination runs smoothly. The students should take the interim examination at the designated location. At least one of the supervisors is concerned with the education of the specific interim examination component.
 - g. Students with permission for extra time should inform the supervisor in advance.
- 2. During an interim examination:
 - a. Students are not allowed to leave the room during the first 30 minutes of the exam.
 - b. A student must be able to identify himself or herself with a document of registration as a student or otherwise at all times during the exam.
 - c. A student who is disruptive during an examination session can be removed from the room, at the discretion of the supervisor.

- d. It is not allowed to leave the examination location 15 minutes before the regular end time of the examination.
- e. If fraud is suspected or observed during or after the exam (e.g. cheating, consulting, etc.), the supervisor will take the appropriate actions, the student's work will not be assessed and the Examination Board will be informed. The Examination Board can exclude the student for a period of at most one year from participating in that specific interim examination component. In the event of intentional fraud, the Examination Board can exclude the student for a period of at most one year from participating in all interim examination components.
 - i. A detailed description of the concept of fraud in written work can be found in Appendix 1.
- f. Every student must hand in at least one sheet of paper with their name and student number written on it.
- g. Students bear full responsibility for the decipherability (e.g. legibility, clarity of sketches, etc.) of the delivered work.
- h. Students are responsible for delivering all relevant work for assessment at leaving the hall.
- i. It is noted on the exam questions whether these must be handed to the supervisor at the end of the exam.

3. Resources

- a. Use of resources is only allowed if specified on the interim examination assignment.
- b. Resources allowed during the interim examination will not be provided if a student has forgotten to bring these resources.
- c. All communication equipment (e.g. smartphones, mobile phones) must be switched off before entering the examination room and must be stored away in bags. Every sign of use will be interpreted as fraud and will be reported to the Examination Board

4. Toilet visits

No more than one student at a time may leave the hall for a toilet visit; this must be reported
to the supervisor. The supervisor may temporarily take the student card for the duration of the
toilet visit.

RULE 7 RULES IN CASE OF EMERGENCIES

- 1. If an emergency occurs or is expected during or shortly before the start of an interim examination, the examiner is authorized to act and the students must follow the examiner's instructions.
- 2. If an emergency occurs or is expected during or shortly before the start of an exam, the following applies: if an emergency is expected before the start of an exam, then the exam is immediately postponed. The examiner sets a new time for the interim examination in consultation with the Director of Education.
- 3. The newly set interim examination date/time must be within one month (excluding the academic holiday period). The newly set exam date/time is made known as soon as possible using the usual media.
- 4. If an emergency occurs or is expected during an exam, the following procedures apply where possible:
 - a. At the beginning of the interim examination, students must write their name and student number on all the exam work.
 - b. On the orders of the responsible authority or supervisor, those present must leave the examination room immediately.
 - c. Students must leave all interim examination work behind in the examination room.
 - d. If students had the opportunity to start the interim examination, and if reasonably possible, the examiner determines a final grade on the basis of the (partly) completed answers.
- 5. If the examiner is unable to determine a final grade as described above, a resit interim examination is organised for the effected students within one month (excluding the academic holiday period) after the exam interrupted by the emergency.

RULE 8 PASS/FAIL REGULATION

- 1. The Examination Board determines pass/fail regulations for every interim examination.
 - a. An interim examination component is passed when the rounded grade is at least 6.
 - b. Grades not rounded off that come to .50 or higher will be rounded to the nearest grade above.
 - c. A grade between 0 and 1.49 will be rounded to 1.
 - d. The requirements for the Master's degree are considered to have been met if the grades for all interim examination components are 6 or higher.
- 2. If a student has been assessed more than once for the same interim examination component, the assessment with the highest grade prevails, unless the Examination Board determines otherwise in exceptional circumstances.
- 3. In the event that an interim examination component is assessed by more than one examiner, the examiners ensure that the assessment is done on the basis of the same standards.
- 4. The results of parts of interim examinations will be recorded in the examiners' written administration.
- 5. A second examiner must assess the work when the assessment for a written exam results is 5. Should different assessments arise after discussion between the two, the grade is determined by taking the average of both assessments.
- 6. The assessment marks are usually expressed as integers on a scale of 1 to 10. The marks have the following meanings:

1: very poor 5: insufficient 9: very good 2: poor 6: sufficient (pass) 10: excellent

3: very strongly insufficient 7: more than sufficient

4: strongly insufficient 8: good

Exam components may also be assessed alphanumerical:

NV: absent V: sufficient/completed

NVD: not accomplished VR: exemption
O: insufficient HNTD: no need to do

7. The Examination Board can declare a grade invalid if the grade was not obtained according to the regulations.

RULE 9 THESIS PROJECT ASSESSMENT

The assessment of the master thesis consists of five components: report, presentation (public, 45 min, followed by answering questions from the audience), defence (closed, 60 min, exam with candidate and Assessment Committee), content (quality of research or design) and working process during master project (individuality, communication skills, etc.).

For the determination of the final mark (not the average of the five components) a 'Thesis Project Assessment' form is used (see Appendix 2). This form is signed by the chairperson of the assessment committee and is archived by the Office of Education Affairs.

To accentuate the assessment an assessment protocol is formulated for the assessment of master theses. This protocol lists assessment aspects for each component on which the mark for this component is based (see appendix 3). This assessment protocol is prescribed by the Examination Board to all assessment committees.

RULE 10 GUIDELINES FOR AWARDING THE DESIGNATION 'WITH DISTINCTION'

In cases of an exceptional level of student achievement and the prove of the student's potential as an exemplary academic engineer, in the judgement of the Assessment Committee, the chairperson of the Assessment Committee can submit a motivated proposal to Examination Board to add the designation 'with distinction/Cum Laude' to the Master's degree certificate. The Examination Board makes a decision.

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. Where 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 the Education Affairs Office within two weeks after the examination.

Beside the 'exceptional competence and ability', as a minimum, the following conditions must be met:

- a. The final grade for the thesis project is at least 9 (rounded).
- b. The assessments of all interim examination components of the Master's programme, including extra courses, are at least 'satisfactory' ('V', 'VR' or 7).
- c. The average of all assessment grades for the interim examination components is at least 8.0 (not counting extra courses).
- d. A grade 6 is gained not more than once in the programme (extra courses are not counted);
- e. All study units were passed without repeating. Resits for satisfactory or unsatisfactory results are not permitted.
- f. No fraud was committed during the entire master's programme.
- g. Any exemptions are for no more than 10 EC of the interim examination components.
- h. The master's programme was completed in 2.5 years, unless exception circumstances, as evaluated by the Examination Board, justified a longer period. Such exceptional circumstances include in any case the circumstances acknowledged by the granting of graduation support.

Where these conditions are not completely satisfied, the chairman of the Assessment 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 11 CERTIFICATES AND REGISTRATION

- The Examination Board awards a Master's degree certificate as proof that the Master's programme
 was completed successfully. This certificate is signed by the chair of the Examination Board. In his or
 her absence, one of the other members is authorised to sign. After the examination of the thesis
 project, the Master's degree certificate is signed by the chairperson of the Assessment Committee and
 the successful candidate.
- 2. The study components reviewed as part of the final assessment are listed in a supplement to the Master's degree certificate. Furthermore, this supplement may list additional units of study reviewed at the student's request (and not as part of the final assessment), provided these study components were completed successfully, and provided these study components meet the required Master's degree level, as assessed by the Director of Education.
- 3. Enclosed to the certificate, a supplement informs on the nature and content of the completed programme.
- 4. If the Examination Board grants the designation "with distinction", this will be added on the Master's degree certificate.

RULE 12 EXEMPTIONS

The Examination Board grants exemptions for taking interim examinations or parts of interim examinations and/or practical assignments when:

- a. An equivalent (in terms of level) and similar (in terms of learning objectives) study unit was passed in another academic programme or at another accredited, and regarded as equivalent, institution of higher education.
- a. In the opinion of the authorised examiner, the student has obtained the learning objectives in another way, as evidenced for instance, by documents provided by the student.

RULE 13 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.

APPENDICES

APPENDIX 1:

ADDITIONAL DESCRIPTION OF THE CONCEPT OF 'EXAM FRAUD' (IN WRITTEN WORK)

Exam fraud means:

- a. The use of more or different aids in an interim examination or a component of an interim examination than those which the examiner, in writing and before the interim examination or interim examination component, had declared allowed.
- b. The use of aids or help of which the student knew or should have known that this was not allowed in an interim examination or a component of an interim examination. In any event, the aids or help as mentioned in the previous sentence include the following:
 - i. Cheating, whether or not:
 - With the aid of crib sheets, other means of help, and/or communication equipment;
 - Through copying or allowing copying in interim examinations;
 - Communicating with others (other than the invigilator or teacher) about the material of the interim examination during the interim examination, when the work has not yet been handed in.
 - Through making use of parts of written work or worked-out answers of others.
 - Use of electronic equipment.
 - ii. Forgery of documents, including taking or allowing the taking of an interim examination under a false name.
- c. Activities of which, before the interim examination or interim examination component, the teacher had made it known in writing that it would be regarded as exam fraud.
- d. Plagiarism: Copying without proper reference to sources and allowing copying.

The following rules apply for preparing written work, programming assignments and the like:

INDIVIDUAL WRITTEN WORK

There is one author who will obtain an individual assessment on the basis of the written work.

Where passages are included, or data are used, that are taken from the work of others, the following must be clearly stated:

- Which passages they are (for example, by putting them in italics or within 'quotation marks');
- Where they come from (by giving a clear source reference: a formal reference to the literature or a phrase such as '... oral information provided by Mrs XX').

'INDIVIDUAL' GROUP-WRITTEN WORK

Different members of the group are responsible for different parts of the report. They must:

• Indicate clearly which member of the group is responsible for which part of the report.

Where passages are included, or data are used, that are taken from the work of other members of the group, the following must be clearly stated:

- Which passages they are (for example, by putting them in italics or within 'quotation marks');
- Where they come from (for example '... this, in addition to the fact that measurements have indicated that the effect is negligibly small (see chapter V of this report), brings us to the conclusion that...')

Naturally, the same rules that apply for individual written work also apply to information obtained from persons outside the group.

'JOINT' GROUP-WRITTEN WORK

- The group as a whole is responsible for the complete contents of the report, even if each group member has taken responsibility for the writing of a separate part.
- In this case, it is not necessary to indicate exactly which idea is whose. Nevertheless, the rules for making use of external sources are the same as for individual written work.
- If a student does not follow the rules stated above, and thus literally includes someone else's work or paraphrases it without a clear indication of the source, he commits plagiarism.
- Not only copying without indicating the source, but also allowing the copying, is taken to be plagiarism/exam fraud.
- In cases of joint group-written work, it is possible to accuse the complete group of exam fraud.
- In cases of plagiarism/exam fraud, the procedure described in rule 6 is followed.

UNIVERSITY OF TWENTE.

INDUSTRIAL DESIGN ENGINEERING

(200 a (200		THESIS PROJEC	T ASSESSMENT
0	Name Student number Master track Chairperson Master programme Assessment date	: : : : attached :	
	Oral presentation Report	: <u> </u>	The thesis assessment committee determines that the status of the graduation report will be: O = "Confidential" (for a period of _ year(s))
	Defence	:	O = "Public" (insert X in the appropriate circle)
	Thesis project (Quality of content)	: <u> </u>	
	Thesis project (Quality of process)	: <u> </u>	
/	GRADE	:	RESULT :
	Thesis Assessment C	<u>committee</u>	<u>Signature</u>
	xxx		
	XXX		
//	XXX		
	XXX		

After signing, please return this form to the Education Affairs Office

UNIVERSITY OF TWENTE.

INDUSTRIAL DESIGN ENGINEERING

Criterion	Motivation
Oral Presentation	
Report	
Defence	
Thesis project (Quality of research or design content)	
Thesis project (Project management and organisation)	

After signing, please return this form to the Education Affairs Office

APPENDIX 3: ASSESMENT ASPECTS (THESIS PROJECT)

- 1. Content and 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 for 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 is innovative (contribution to new knowledge/contribution to a concrete product, design or model);
 - Learning (quality and quantity).

2. Report

- Composition, structure;
- Consistency;
- Clarity/sharpness of formulations;
- Readability;
- Editing, layout;
- Images and tables (usefulness, added value);
- References to literature.

3. Working process during Master's 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);
- Extent to which the original research proposal has been met and reasons for alterations (keeping up with work planning, following up on appointments);
- Time needed to finish Master's thesis.

4. Oral presentation

- 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;
- Answering questions/discussion;
- Ability to interpret/understand/analyse questions.

Profiles for final grading

5: Insufficient

The quality of the research and/or report is 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 as well as layout. 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 into an article for a renowned (scientific) journal without putting in too much effort. With respect to content, the research is very solid with some aspects that can clearly be pointed out as strong. The report is carefully edited and shows that the student has good writing skills. The student's own input and level of independence are considerable. The student clearly oversees the subject matter and is well able to defend his or her statements in discussions. The student scores at least 'good' on all assessed aspects 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 very good, with some points that can be clearly pointed out as excellent. The student is very capable of conducting research independently. The report and the presentation show that the student disposes of very good communication skills (written and oral). The student scores 'very good' on all aspects for assessment.

APPENDIX 4: HOW TO DEAL WITH INTELLECTUAL PROPERTY RIGHTS WITHIN THE UNIVERSITY OF TWENTE?

Intellectual property is the umbrella term for rights to intellectual creations, such as texts, software, and inventions. Intellectual property is protected by specific legislation that includes the Copyright Act and the Patents Act.

In this document, we will focus on 'copyrights' and 'patent rights' as, within the UT, we are predominantly dealing with works which are protected by a copyright and with inventions that can be protected by means of a patent right.

COPYRIGHT

Article 1 of the Copyright Act 1912 describes the copyright as follows:

"Copyright is the exclusive right of the author of a literary, scientific or artistic work or his successors in title to disclose the work to the public and to reproduce it, subject to the exceptions laid down by law."

These types of works include, for example, doctoral theses, (graphical) designs, geographical maps, Apps, and software.

However, in order for the work to be protected by copyright, there are three general conditions that must be met: it must have an original (creative) character, it must be fixed in a tangible medium of expression, and it should not form an integral and essential part of a technological process.

In the first instance, the copyright on such a work is granted to the author of the work, effective from the moment he or she created the work. [1] The copyright does not necessarily have to remain the right of that author. This is because the right can be transferred to someone else, for example when the author sells the copyright.

Whoever holds the copyright to a certain work has two exclusive rights: the exclusive right to disclose the work to the public domain and the exclusive right to reproduce it. This means that any other person who is not the copyright holder will not be allowed to publish and/or reproduce the work of its own accord. In principle, the prior consent of the copyright holder is required for such actions, as he or she is the sole person who has the copyright control over the work.

In addition to the above-mentioned exploitation rights, every author of a work is granted a few rights relating to personality. These rights, which are also called 'moral rights', cannot be transferred to other persons and will thus remain with the author, even when the author has sold his or her copyright (meaning the rights to disclose and reproduce) to a third party.

The copyright on a work that was made in the course of employment

When a work was made in the course of employment and the author is employed to create certain works or he or she was assigned to do this, the employer will be deemed to be the author and, therefore, the copyright holder [2].

The copyright of an academic/scientific publication

When the work consists of an academic publication that was made in the course of employment at a university, such as a doctoral thesis or scientific article, the copyright will be granted to the author and not to the employer (the university).

The copyright on works created for educational purposes

When the work consists of teaching or educational material that was made in the course of employment at a university, the copyright is granted to the employer (the university).

The copyright on a work that was made under the guidance and supervision of a third party

When the work was made according to the design of another person and under this person's guidance and supervision, the copyright is granted to this other person [3].

The copyright on a final project report or final thesis

The copyright on a final project report or thesis is granted to the student who graduates. So the copyright does not lie with the institution where the student graduates or with the supervising lecturer, or the organization

where the final project or study was carried out, provided that no other arrangement or agreements have been made. With regard to reports that are the result of a study carried out at an organization, it is important to make clear prior agreements about who will become the copyright holder.

The copyright on a work that is the result of teamwork

When a clear distinction can be made between the individual contributions, then all authors will have the copyright on their own individual part of the work. When the individual contributions cannot be distinguished, the authors will be granted a joint copyright on the entire work.

PATENT RIGHT

A "patent" is an exclusive right on an invention that entitles you to prohibit third parties to apply your invention commercially in a certain judicial area, during a certain period of time. A patent protects your invention of a technical product or process. Whoever holds a patent right can prohibit another person to copy, sell, or import the invention it concerns. Even when the other person created the invention independently as well. The patent is always granted for one or more countries and for a limited period of time. When the patent right expires, the technology can be freely used by anyone. In order to be granted patent protection, you must have made a technological invention that complies with three material conditions.

The term 'technological invention' includes any product or process in all technological areas. The material conditions are:

- "novelty", the product or process must not be publicly known or disclosed anywhere in the world before the date of the patent application, not even by the inventor himself (for example by means of a company brochure or a presentation at a trade fair);
- "inventive step", the product or process must not be an obvious solution for the professional or manufacturer; and
- "industrial applicability", the invention must be a product or production process that can actually be manufactured and applied. Generally speaking, the person who does the invention is entitled to file the patent application (provided that the invention itself is patentable). However, there are a number of particular circumstances. For example, the company where this person is employed may hold the right to do the patent application, or the inventor may have signed a contract that states that he or she passed the right to someone else or a third party.

UNIVERSITY OF TWENTE EMPLOYEES AND THE PATENT RIGHT

Article 12(3) of the State Patent Act 1995 states: "If the invention has been made by a person carrying out research in the service of a university, college or research establishment, the university, college or research establishment in question shall be entitled to the patent."

Additionally, the collective labour agreement for Dutch universities ("CAO") applies in this regard to the employees of the University of Twente. [4] This CAO includes a few provisions with regard to patent rights and copyrights. The main points are:

Article 1.21(1) of the CAO says: "An employee who, during or otherwise coinciding with the performance of his duties, creates a possibly patentable invention or, by means of plant selection work, isolates a new variety for which plant breeder's rights may be obtained, is obliged to report this in writing to the employer and must submit sufficient data to enable the employer to assess the nature of the invention or variety."

Article 1.22(1) of the CAO says: "Without prejudice to the provisions in Section 12 of the State Patents Act, Bulletin of Acts & Decrees 1995, 51, Section 31 of the Seeds and Planting Materials Act, Bulletin of Acts & Decrees 1966, 455 and Section 7 of the Copyright Act, Bulletin of Acts & Decrees 1912, 308, the employee, if and insofar he is entitled to other than moral rights to the invention, the variety or the work, for which the obligation to report in Article 1.21 exists, shall transfer these rights to the employer in whole or in part if so requested, in order to enable it to make use of them in the context of fulfilling its statutory duties within a term to be established later."

Article 1.23(1) of the CAO says: "In the event the employer makes use of the rights transferred to it, the employee is entitled to fair reimbursement."

This means, in principle, that when employees of the UT make an invention, then they must inform the UT about this invention and the rights to this invention will be granted to the UT.

COPYRIGHT

When employees of the UT create a work that is protected by copyright, such as designs, geographical maps, Apps, and software, and they are employed to create such works or were assigned to do so, the UT will be deemed to be the creator and will, therefore, be the copyright holder.

Exceptions to the above-mentioned are academic publications such as doctoral theses or scientific articles. The copyrights on academic publications lie with the author.

When the work consists of teaching or educational material that was made in the course of employment at the UT, the UT will be the copyright holder.

IMPLEMENTING REGULATION PATENTS UNIVERSITY OF TWENTE

The employee of the UT, who suspects that he or she has done an invention in the context of direct or indirect government funding or commercial funding whereby the UT is (co-)owner of the intellectual property rights on the results, has the obligation to report his/her invention without delay to the UT Business Development Team and to the managing director of the research institute the inventor is part of.

The revenues received by the UT or Holding Technopolis Twente BV (the holding company of the UT) based on the commercial exploitation of an invention done by a UT employee will be distributed as follows:

- the costs with respect to the application of the patent rights which were covered by the Patent Fund and possible additional costs covered by the chair involved in the creation of the invention will be deducted from the revenues. These amounts will be paid to the Patent Fund and, when applicable, to the respective chair;
- ii. the possible remaining revenues will be distributed according to the following principles:
 - o 33 ½ % to be distributed to the inventor(s), individually or jointly after mutual consultation;
 - 33 ½ % to be distributed to the chair the inventor(s) is/are part of, to be used for the funding of new research activities;
 - 33 ½ % to the Patent Fund.

Additionally, this regulation applies by analogy (as much as possible) to the exploitation of copyrighted works and/or know-how.

STUDENTS UNIVERSITY OF TWENTE

The CAO does not apply to students of the UT and, therefore, the rights on inventions and works protected by copyrights will, in principle, be granted to the student who has made the invention or who has created the copyrighted work.

However, the State Patent Act 1995 includes certain provisions with regard to patent rights. Article 12(2) of the State Patent Act 1995 states: "Where the invention for which a patent application has been filed has been made by a person who performs services for another in the context of a training course, the person for whom the services are performed shall be entitled to the patent unless the invention has no connection with the subject of the services."

This means, for example, that when a student does an internship with an organization and the student makes an invention that is related to the subject of the activities, the patent right will be granted, in principle, to the organization where the respective student does the internship. All this may also depend on what has been agreed in the internship agreement.

STUDENT PARTICIPATION TO RESEARCH (JOINTLY) EXECUTED BY THE UNIVERSITY OF TWENTE

It regularly happens that students, as part of a final bachelor's assignment or final thesis project, participate in a study or research that is (partially) carried out by employees of the UT.

With respect to this research, the UT has, in most cases, entered into an agreement with other parties that (partially) fund that research, such as grant givers, governmental institutions, or companies. In general, the research agreement will include agreements on intellectual property rights.

In such cases that the research agreement states that the UT will transfer its intellectual property rights to the research institution, the UT must, of course, be entitled to transfer these rights. This is not a problem with

regard to rights on the results that were generated by UT employees. It will, however, be a problem when it comes to the rights on results generated by students (of the UT).

It is, therefore, our advice that agreements with students are concluded, prior to the students' participation in the research that is (partially) carried out by the UT, that students will transfer all their rights on the results that will be generated as part of the research. The UT may choose to compensate students for the transfer of the rights on the results in a similar manner as if the student were an employee of the UT (see patent regulation UT). The UT has drawn up a model contract for this purpose.

- [1] Article 4 Copyright Act (http://wetten.overheid.nl/BWBR0001886/)
- [2] Article 7 Copyright Act (http://wetten.overheid.nl/BWBR0001886/)
- [3] Article 6 Copyright Act (http://wetten.overheid.nl/BWBR0001886/)
- [4] http://www.vsnu.nl/cao-universiteiten.html