UNIVERSITY OF TWENTE.

Education and Examination Regulations

Master Industrial Design Engineering

2023-2024

PREFACE

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 Programme Director 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 should be understood as referring to the female gender as well.

For special possibilities within the study programme, reference is made to the education page of the Master's in Industrial Design Engineering and, for information about course content, to the Educational Catalogue, whenever necessary.

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

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TABLE OF CONTENTS

Contents

ARTICLE 1. GENERAL CONDITIONS

1.1 Applicability of the regulation

1. This regulation applies to the education and the examinations of the Master's in 'Industrial Design Engineering' at the University of Twente, hereafter called: the programme.
2. The programme is provided under the responsibility of the Faculty of Engineering Technology at the University of Twente, hereafter called: the Faculty.
3. The final responsibility for the implementation of the education programme rests with the programme director. A student who doubts whether he has been treated in conformance with the regulations can ask the programme director for clarification. It is always possible to appeal against a decision that has been taken via the UT Complaints Desk.

1.2 Definition of terms

Academic year	The time period that begins on 1 September and ends on 31 August in the following year
Admission Committee	The Admissions Committee is appointed by the Dean (Article 7.30 WHW).
Assessment plan	A plan indicating how the testing of a course is organised. At first, it states the grading of the study units of the course, and secondly, the conditions for passing the course (including possible compensation rules within the course).
Assignment	Carrying out a design or a research project
BOZ	The Educational Affairs Office, Engineering Technology (Industrial Design Engineering), within Centre for Educational Support (CES)
Canvas	The digital learning management system of the University of Twente
Colstruction	Combination between a lecture and a practical
Compulsory Holiday	Compulsory day free of work
Course	A component of the study programme to which a course code is assigned
CPO	Personal Circumstances Committee. A committee formed by the institutional board that issues advice to the programme board in individual cases concerning the validity, term and seriousness of the personal circumstances of the student involved
Curriculum	The entirety of compulsory and optional study units belonging to the programme.
Dean	The Dean of the Faculty of Engineering Technology
EC	A unit of 28 hours of study workload, in accordance with the European Credit Transfer System, a full academic year consisting of 60 EC or 1680 hours (Article 7.4 WHW).
Essay	A written report about a theoretical or practical project/assignment
Exam	An evaluation with a study unit of the knowledge, understanding and skills of the student, as well as the assessment of the results of this evaluation (Article 7.10 of the WHW); an exam may consist of a number of tests.

Examination	An inquiry into the knowledge, the insight and the skills of a student relating to a particular unit of education, as well as the assessment of that inquiry by at least one examiner designated by the Examination Board for that purpose
Examination Board	The body that establishes objectively and expertly whether a student meets the criteria set in the education and examination regulations regarding knowledge, insight and skills needed for obtaining a degree (Article 7.12 WHW).
Examiner	The individual who has been appointed by the examination board in accordance with Article 7.12c of the WHW to hold exams and tests and determine their results.
Exemption	Establishing by the examination board that a student has acquired competences, i.e. on account of exams or final examinations in the higher education domain passed earlier, or knowledge or skills acquired outside the higher education domain, that are comparable in content, size and level to one or more study units or parts thereof
Faculty	The Faculty of Engineering Technology (ET), University of Twente
Faculty board	Head of the faculty (Article 9.12 WHW).
Graduation examination	An evaluation by which the Examination Board determines whether all examinations of the courses belonging to the programme have been passed (Article 7.10 WHW)
HBO-Bachelors	Bachelors from a University of Applied Sciences
Institution	The University of Twente (UT)
Institution Board	The Executive Board of the University of Twente
Lecture	A plenary meeting for the students which is intended to convey information
Literature study	The undertaking of literature research into specified scientific phenomena
IDE	Industrial Design Engineering; this qualification prefixing, for example, student, programme, examination, etc. is in many cases in this Charter hereafter omitted in the interests of readability.
OSIRIS	System designated by the institutional board for registration and for providing information on all relevant data related to students and the university, as described in WHW.
Partner Institution	An institution with which the university has a structural relationship for collaboration, in which the programme is active. For example the 4TU federation and the ECIU[1]-network (http://www.eciu.org/)
Practical exercise	A practical exercise as intended in Article 7.13 paragraph 2 subparagraph d of the [Dutch] law. This is understood to mean participation in an education activity designed to master certain skills, such as completing written work or a prototype design, the carrying out of tests and experiments, and participating in field work or an excursion

[1] European Consortium for Innovative Universities

Pre-Master	The pre-master's programme is a transfer and bridging programme for Universities of Applied Sciences (HBO) or University Bachelor programme students who wish to obtain a university master's degree, but who cannot be admitted directly.
PILO	Programme Intended Learning Outcomes
Programme	The Industrial Design Engineering programme (IDE), University of Twente
Programme Board	The committee charged by the faculty board with managing the programme. This may also be an individual person. In which case the term programme director is used.
Programme Committee	The Programme Council consists of chairmen of Departments and professors in the Faculty, whose subject area(s) belong to the domain of industrial design engineering, as well as a member of the Board of the Faculty
Programme Director	The programme director of the IDE programme
Project	Carrying out as a team a design or a research project
Quartile	A quarter of an academic year
Seminar	A meeting for a subgroup of the population to offer students the opportunity to work through the learning materials (also supervised self-study).

Any terms not defined here have the meaning assigned to them by the WHW

ARTICLE 2. ADMISSION

2.1 Requirements for previous education

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 can be achieved in several ways:

1. Graduates from the three Dutch Universities of Technology holding a university Bachelor's degree in Industrial Design are admitted unconditionally.
2. In many cases, those holding a university Bachelor's degree 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 specialisation is chosen. See also the progression matrix, which is published annually (partly in Dutch). In all these cases, individual variations are possible.
3. Those holding a university Bachelor's degree from an Industrial Design programme (or adjacent discipline) at a foreign university can be admitted if:
    - the university has a good reputation; and

- the student has a CGPA of at least 75% of the maximum score, or the country's equivalent; and
- the additional requirements (including the language requirements) are satisfied.

4. Those who have successfully completed a pre-master's programme are admitted (see Article 2.3)

2.2 Additional requirements for students with 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.

2.3 Pre-Master programme

1. 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 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.
5. Students who are unable to complete a pre-master's programme within 12 months are not re-admitted to a pre-master's programme in a following study year.
6. If Introduction to Math + Calculus 1A and Calculus 1B are part of the pre-master programme, a grade of 4,5 of higher for Introduction to Math + Calculus 1A may be compensated with a 7,5 or higher for Calculus 1B. The average of both courses should be at least 6,0.

ARTICLE 3. VISION OF THE PROGRAMME

3.1 Aims of the programme

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.

Programme intended learning outcomes

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.
b. *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 and scientifically 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.

3.2 Purpose of the master

In the 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 specialisations 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 specialisations 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 programme, part of the education is aimed at all programme students, while the accent specific for a certain track is achieved by way of special projects. The graduation 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.

3.3 Organisation of the programme

The two study years of the programme are each divided into four quarters. The first five quarters of the programme consist of courses. The courses must be fully completed before the graduation project can be started. Many courses are completed with a project or with an oral examination.

a) The Master's Industrial Design Engineering is provided as a full-time programme.
b) 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.
c) 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)

d) Each student composes his own programme within the boundaries of the programme constraints as laid down by the EER. The student selects core courses[2] from the IDE programme, of which at least one course per track is compulsory. In addition, the student can take the initiative to emphasise (elements of) both depth and breadth in his programme. The graduation project (45 EC) is the master's examination and the endpoint of the programme.

e) The programme for a student consists of: 120 EC

a. Core courses (at least one from each track)	10 - 50
b. Specialist courses as preparation for the graduation project	0 – 20
c. Electives (personal accent, in-depth or in-breadth, at maximum 5 EC for the study tour)	0 – 20
d. Graduation project	45
Total for the programme (minimum)	120

3.4 Language

English is the language of tuition and the examinations are administered in English. Exam and test questions have to be answered in English. Answers in any other language will be ignored and therefore not marked. The graduation report is also written in English. In special occasions deviation from the provisions is possible. Permission must be obtained beforehand from the Examination Board.

3.5 Internationalisation

IDE master students may take part of their study programme abroad. This may concern regular courses and the graduation project as long as the condition formulated in Article 4.5 are met. In any case the student needs permission of the track coordinator and the Programme Director.

ARTICLE 4. EDUCATION AND PROGRAMME

4.1 Information supply

1. A course description, method of examination and the form of the education are published before the start of the course. For this purpose reference is made to the Osiris course information on www.utwente.nl/ide, with the reservation that education is susceptible to continuous change. The most up-to-date course information, as it I applicable, is found on LMS.
2. The programme ensures the registration of study results.

4.2 Composition of the personal study programme

1. The student puts together an individual study programme (ISP) 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 Programme Director.
2. The approved ISP must be submitted to the submitted to the Office of Educational Affairs (BOZ).
3. A form published on the LMS must be used to provide the required information.
4. 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.

4.3 The free MSc programme

1. 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] Courses compulsory for all students in the track or strongly recommended courses offered by other tracks

2. The Examination Board determines whether the ´free´ programme is actually built upon educational 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 graduation project.
4. If the Examination Board does not approve the proposal which has been submitted, it must give clear reasons for its decision.

4.4 UT two-master programmes

The Master's 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 mastertracks; and
b. the student must meet the requirements of each of the mastertracks; and
c. the total workload of the double master degree is 180 EC and must consist of a combined master assignment of 60 EC; and
d. the proposed study programme must be approved by the examination committees of both programmes.
e. the student must reach the PILO's of each Master's programme.

4.5 Regulation for including international courses in the programme

The incorporation of international courses or projects into the study programme requires the prior approval of the track coordinator and the Programme Director. It may concern a company placement, a placement at a university or scientific institution, a graduation project and/or a number of regular courses at a foreign university. The procedure for including courses abroad in the 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 content of the course(s).
b. No international courses may be included that substantially overlap with regular UT courses that have already been completed or that still have to be completed.
c. If necessary the Office of Educational Affairs calculates the number of EC's by using the Credit Conversion Table of the UT.
d. Only 30 EC can be included in the student's examination programme. After approval of the examination board the remaining courses can be listed as 'extracurricular courses' on the diploma supplement, provided that the courses are part of a recognized master's programme.
e. After approval of the examination board and the track coordinator, the full graduation project abroad of 45 EC can be included in the examination programme of the student.

4.6 Time periods, times and frequency

1. There will be an opportunity at least twice a year to sit written or oral examinations. Practical exercises can be completed at least once per year.
2. There is at least one opportunity to sit an 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 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 examinations can be taken.
5. The 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 examinations.

6. The Dean must approve any changes to the examination schedule. Students will be informed of any changes. The Programme Director must inform the Examination Board of these changes during the next examination meeting.
7. Students are required to register for written 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 examination.
9. A student can withdraw from an examination no later than the day before the examination in question.
10. Should a student fail to appear for an 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 the Osiris as a fail. This will count as an unsuccessful examination attempt.

4.7 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.

4.8 Approval, publications and registration of results

1. The result of a written examination or practical exercise is published via the Osiris within fifteen working days.
2. The result of an oral 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 examination is part of a series of oral 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 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 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 examination.
6. If a second examination opportunity is planned shortly after the first, the results of the first examination will be published at least ten working days prior to the second 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.

4.9 Duration of validity of assessments

1. The period of validity for the results of exams that have been passed is unlimited unless the tested knowledge, insight or skills are proven to be out of date.
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 examinations that are part of a series or combination of 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 system (LMS).

4.10 Right of inspection and discussion

1. Students have the right to hear a justification of the results of an 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 examination results. This discussion, or a collective review, must be held within five weeks of publication of the examination results. After this term of five weeks, the student will no longer have the right to a discussion of the results of an examination and a justification of the assessment by the examiner.
2. The examiner responsible for the assessment of a student's written 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.

4.11 Quality assurance

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

ARTICLE 5. FINAL DEGREE

5.1 Examination of the programme

5.1.1 Requirements

Reporting and completing of the graduation 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 graduation 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.

The following applies for passing the master's graduation project:

1. Student receives a pass for the project if all partial grades are ≥ 5.5.If students do not comply with this, the following rules are applied:
2. Student receives a fail for the project if a partial grade is lower than 4.5.
3. Student receives a fail for the project if more than two partial grades are lower than 5.5.
4. For every partial grade below 5.5 (but ≥ 4.5), student must do supplementary work in order to pass the project.
    i. Supplementary work can earn a maximum partial grade of 6.0.
    ii. If a supplementary work assignment (one or more may be assigned) is assessed with a partial grade below 5.5, the student fails the project.
    iii. Agreements about the contents and time allotted to complete supplementary work are made during or as soon as possible after the project exam.

Completion of the graduation 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 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.

5.1.2 Duration

The nominal duration of the graduation project is 40 weeks. The student registers in Mobility Online at the start of the graduation project. This includes the actual start date and the intended end date.

After at most 36 weeks from the start of the graduation project, the supervisor(s) and the student discuss whether completion, defined by the handing in of the final version of the thesis, within 40 weeks is feasible. If completion within 40 weeks is not feasible, the supervisor can decide to grant an extension of 12 weeks. The supervisor notifies the examination board and the track coordinator of this extension.

In the case of an extension, the project will be submitted not later than after 52 weeks from the start of the graduation project, followed by an assessment. If this results in a fail, then the student has to start a new graduation project. The examination board, however, may, in exceptional and individual cases grant an additional extension.

It is left to the discretion of the supervisor to skip periods in determining the 40 or 52 week mark because of possible delays, such as illness, unavailability of resources etc., beyond the control of the student. The Examination Board may ask for clarification.

5.1.3 Members of the graduation 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.

5.2 Degree

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.

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

1. To show that the master's examination has been successfully completed, a degree certificate is awarded by the Examination Board. The degree certificate is signed by the persons listed in Appendix 3. 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.

5.3 Cum Laude

Beside the 'exceptional competence and ability' as a minimum, the addition Cum Laude' will be awarded when the following conditions are met:

a. The final grade for the graduation project is at least 8.5 (rounded).
b. At most, one 6 is awarded. The assessments of all other examination components of the programme, including extracurricular courses, are at least 'satisfactory' ('V', 'VR' or 7).
c. The average of all assessment grades for the examination components, excluding the graduation project, is at least 8.0 (not counting extra courses).
d. All study units were passed without repeating. Resits for satisfactory or unsatisfactory results are not permitted.
e. No fraud was committed during the entire programme.
f. Any exemptions are for no more than 10 EC of the examination components.
g. The programme was completed within 2.5 years and the double degree programme was completed within in 3 years and 9 months. Unless exceptional 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 'Cum Laude'. The Examination Board makes a decision.

ARTICLE 6. STUDENT GUIDANCE

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.

6.2 Studying with a disability

For more information regarding studying with personal circumstances please check the regulations on the website.

ARTICLE 7. AMENDMENTS, TRANSITIONAL ARRANGEMENTS, APPEALS AND OBJECTIONS

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.

7.2 Administrative errors

If an error is discovered following the publication of an 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.

7.3 Amendments to the regulations

1. Amendments to these Teaching and Examination Regulations are declared by the Dean in a separate decree.
2. Amendments to these regulations do not apply to the current academic year, unless these changes prejudice the students, or in situations of force majeure.
3. Amendments to these regulations have no effect on earlier decisions of the Examination Board.

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 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 examinations for a discontinued study component may be taken.

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.

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.

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.

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.

7.9 Date of effectiveness

These regulations enter into force on 1 September 2023 and replace the regulations of 1 September 2022.

APPENDICES

Appendix 1: Procedure for master 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:

1. 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 graduation 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 Office of Education Affairs two weeks before the examination.

7. The student ensures that at the time of the last examination, he is enrolled in the programme of the UT.

8. Student Services checks whether the student has satisfied all (registration) requirements.

9. 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 graduation 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 graduation project (colloquium and cross-questioning) can be carried out, subject to the approval of the Programme Director. 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 Programme Director 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 examination

In the assessment of the graduation 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 specialisations;
- 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).

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.

In the case of a complete and regular programme, the student passes if the following conditions have been satisfied:

- The assessment of the graduation project is satisfactory;
- All marks are 6 or higher, 'exempt' (VR) or 'completed' (G).

Appendix 3: Authority to sign degree certificates and statements

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 graduation project, the certificate is signed at the appropriate time by the Dean and the Programme Director. 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 Programme Director as the second signatory.

Appendix 4: Course List

IDE courses 2023-2024

Quarter 1/5	Quarter 2	Quarter 3	Quarter 4
Governing Product Development 5,0 Lutters DE 192850730	Product Life Cycle 5,0 Toxopeus DE 192850740	Product Life Cycle Management 5,0 Lutters DE 192850750	Virtual Reality 5,0 Damgrave DE 201000201
Packaging Design & Management 1 5,0 Ten Klooster PDM 192850910	Packaging Design & Management 2 5,0 Ten Klooster PDM 192851010	Intellectual Property in Product Develop 5,0 Damgrave DE 192850960	Lean Six Sigma Green Belt 5,0 Hoekstra DE 191127520
Brand Management 5,0 Henseler PMR 201700019	Empirical Methods for Designers 5,0 Schuberth PMR 201500008	Advanced 3D Modelling 5,0 Lutters DE 201500518	Embodied Interaction 5,0 vDijk HCD 201500133
Create the Future 5,0 Eggink ID 202100122	Distributed Product Development Project 5,0 Lutters DE	Conceptual Design Methods 5,0 vDijk HCD 202100156	Design and Behaviour change 5,0 Karahanoglu/vRompay ID/BMS/CS-CMC 201700008
Science and Technology Studies 5,0 Turnhout BMS/STEPS 201200064	Multisensory Design 5,0 Ludden ID 201400180	Design Histories 5,0 Eggink ID 201200137	Nature Inspired Design 5,0 Matthews DE 202100313
Sources of Innovation 5,0 Shirazi DE 192850840	Graphic Language of Products 5,0 Mulder - Nijkamp PMR 200900077	Design Thinking Service & Business Innovation 5,0 Henseler PMR 202001492	Smart Environments Integration Project 5,0 Reyes Garcia DE 201000212
Maintenance eng. & management 5,0 Braaksma ME 201200146	Surface Engineering for Look & Feel 5,0 VdHeide/Matthews ST 192850870	Design for Additive Manufacturing 5,0 Mehrpouya AMSPES 202100128	Smart mobility 5,0 Baran Ulak TP 2E+08
3D printing 5,0 Vaneker DE 201400103	Electric Vehicle System Design 5,0 Bonnema DE 201500009	Biomechanics of Human Movement 5,0 Sartori BE 201800156	
Integrative Design of Biomedical Products 5,0 Tuijthof DBP 191150700		Durability of Consumer Products 5,0 Matthews ST 201000159	
Design, Production & Materials 5,0 Baran Ulak TP 191121720		Design for Maintenance Operations 5,0 Martinetti ME 201500235	

Summer period

Triz - Fundamentals 191100010	3,0 Vaneker	DE
Triz - Assignments 191100020	2,0	

Legend

MPD

HTR

ETD

other