TEACHING AND EXAMINATION REGULATIONS

MASTER OF SCIENCE INTERACTION TECHNOLOGY

A. FACULTY SECTION
B. PROGRAMME-SPECIFIC SECTION

2019-2020 academic year

Introduction to the Teaching and Examination Regulations for Master's degree programmes at the Faculty of Electrical Engineering, Mathematics and Computer Science.

<u>General</u>
The Dutch Higher Education and Research Act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*, WHW) of 1993 requires a broad outline of the teaching programme and examining for each degree programme to be recorded in the Teaching and Examination Regulations (TER (Dutch: OER)).

In accordance with Section 7.13, Paragraph 1, of the WHW, the TER must contain sufficient and clear information about the degree programme or group of programmes to which they apply. Section 7.13, Paragraph 2, of the WHW lists those issues that must, as a minimum, be stipulated in the TER with respect to procedures, rights and responsibilities relating to the teaching and examinations that are part of each degree programme or group of programmes. The WHW also includes a number of separate obligations relating to the inclusion of rules within the TER.

The model TER is subdivided into two sections (Section A and Section B), which together form the TER. Section A, which can be seen as the faculty section, includes provisions that may apply to several Master's degree programmes. Section B contains the provisions that are specific to the particular Master's degree programme.

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SECTION A: FACULTY SECTION

A1. General provisions

Article A1.1 Applicability of the Regulations

1. These Regulations apply to teaching and examinations for the following Master's degree programmes: Applied Mathematics, Business Information Technology, Computer Science, Electrical Engineering, Embedded Systems, Interaction Technology, Internet Science and Technology, Systems & Control (hereinafter referred to as: the Master's programmes) provided by the Faculty of Electrical Engineering, Mathematics and Computer Science (hereinafter referred to as: the faculty or EEMCS) of the University of Twente.
2. These Regulations consist of a faculty Section (Section A) and a programme-specific Section (Section B). Section A contains general provisions that apply to teaching and examinations for all the Master's programmes at EEMCS. Section B contains programme-specific provisions. Together, Sections A and B form the Teaching and Examination Regulations for the relevant programme.
3. The Regulations also apply *mutatis mutandis* to the joint Master's degree programmes and study units provided by the faculty, pursuant to Section 7.3c of the WHW.
4. These Regulations apply to anyone enrolled in the Master's programmes, irrespective of the academic year in which the student first enrolled in the programme.
5. Section B of these Teaching and Examination Regulations may include additional general provisions for the relevant programme.
6. The general provisions and the programme-specific provisions to the Teaching and Examination Regulations have been authorized by the Dean.
7. The Examination Board sets down rules with regard to the execution of its tasks and powers in accordance with Section 7.12b of the WHW. These regulations are specified in the Rules and Guidelines of the Examination Board.

Article A1.2 Definitions
The following definitions are used in these Regulations:
   a. **Academic year:** the period beginning on 1 September and ending on 31 August of the following calendar year;
   b. **Admissions Board:** the committee that assesses, on behalf of the Dean, whether a candidate meets the requirements for admission to the Master's programme of his/her choice. If no Admissions Board has been appointed for the programme, the Programme Board will function as the Admissions Board;
   c. **Bridging programme or pre-Master's programme**: a programme that can be offered to students who cannot yet be admitted to the Master's programme due to insufficient knowledge, understanding or skills, in accordance with Article 7.30 of the WHW;
   d. **Course catalogue:** the guide for the Master's programme concerned that provides further details of courses and other information specific to the programme. The course catalogue is available digitally at www.utwente.nl/coursecatalogue;
   e. **Course:** a study unit of the programme, as defined by the WHW;
   f. **Dean:** head of the faculty;

g. **Disability**: any condition which is (at least for the period in question) chronic or long-term in nature and which constitutes an on-going disadvantage for the affected student when receiving education, taking examinations or taking part in practical exercises;

h. **Double degree:** two degrees awarded by two institutions of higher education that offer a joint study programme; the joint programme covers the programme intended learning outcomes of both programmes;

i. **EC**: European Credit**. A unit involving 28 hours of study, as used in relation to the European Credit Transfer System (ECTS), whereby a full academic year consists of 60 ECs or 1,680 hours (Article 7.4 WHW);

j. **Examination programme**: all study units of a study programme counting towards the degree;

k. **Examination Board:**. The Examination Board is the body that establishes, in an objective and expert manner, whether a student meets the criteria set out in the Teaching and Examination Regulations regarding the knowledge, insight and skills required in order to obtain a degree from the programme concerned;

l. **Examiner:** the individual who has been appointed by the Examination Board, in accordance with Article 7.12c of the WHW, to hold examinations and tests and to determine their results;

m. **Executive Board:** Executive Board of the University of Twente;

n. **Final degree audit:** a Master's degree programme concludes with a final degree audit. A final degree audit is deemed to have been completed successfully if the study units associated with the relevant programme have been achieved. The final degree audit may also include an additional assessment by the Examination Board;

o. **Fraud and plagiarism:** fraud is an act or omission by a student designed to partly or wholly hinder the accurate assessment of his/her own knowledge, understanding and skills, or those of another person. Fraud includes plagiarism, which is the use of someone else's work without including a correct reference to the source. See the Student Charter of the UT for further details.

p. **Homologation:** a programme that can be offered to students who can be admitted to the Master's programme but who nevertheless have insufficient knowledge, understanding or skills, according to Article 7.30 of the WHW;

q. **Examination, also exam:** an assessment of the student's knowledge, understanding and skills relating to a course. The assessment is expressed in terms of a final grade. An examination may consist of one or more tests (*in Dutch: toetsen*);

r. **Joint degree:** a degree awarded by an institution together with one or more institutions in the Netherlands or abroad, after the student has completed a degree programme (a degree programme, a major or a specific curriculum within a degree programme) for which the collaborating institutions are jointly responsible;

s. **Learning Management System (LMS)** e.g. Canvas;

t. **Master's programme or programme:** the Master's degree programme, as referenced in Article 7.3a Paragraph 1 subparagraph b of the Act: the entirety of the course components, teaching activities/methods, contact hours, testing and examination methods and recommended literature;

u. **Master's thesis project / final project:** a study unit comprising literature research and a contribution to scientific research, which always results in a written report;

v. **Practical exercise:** participation in a practical training or other educational learning activity, aimed at acquiring certain (academic) skills. Examples of practical exercises are:
   - researching and writing a thesis;

- carrying out a research assignment;
- taking part in fieldwork or an excursion;
- taking part in another educational learning activity aimed at acquiring specific skills or participating in and completing a work placement.

w. **Premaster:** the combination of courses to be followed by a student in order to be eligible for enrolment in a Master's programme.

x. **Programme Board:** the committee charged by the Dean with managing the programme;

y. **Programme Committee:** the Programme Committee as referred to in Article 10.3c WHW;

z. **Quarter or quartile:** a part of a semester as specified in the academic calendar (*jaarcirkel*) of the university;

aa. **Semester:** half an academic year, as specified in the academic calendar (jaarcirkel) of the university

bb. **Student Information System (SIS)**: the system used by the institutional administration to register and record information relating to particular students and study data, as stipulated in the WHW, in this case Osiris;

cc. **Student:** any person enrolled for a programme in accordance with Articles 7.34 and 7.37 of the WHW;

dd. **Student's chair: Research chair of the student's supervisor for the final project**

ee. **Study Adviser:** staff member appointed by the Dean of the Faculty to act as an intermediary between the student and the programme and, in this capacity, to represent the interests of the students and provide advice to the students;

ff. **Study load:** the study load associated with a study unit to which an examination applies, expressed in terms of ECs (the study load for one academic year (1,680 hours) totals 60 ECs);

gg. **Study Programme:** all study units followed by the student as part of his/her Master's programme;

hh. **Test:** part of an examination (*toets*);

ii. **University:** the University of Twente (UT);

jj. **WHW:** the Dutch Higher Education and Research Act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*).

Any other terms used can be assumed to follow the definitions ascribed to them by the WHW.

A2. Previous education and admission

Article A2.1 Previous education

1. In order to qualify for enrolment in a Master's programme, either a Bachelor's degree obtained through academic higher education (WO) is required, or a Bachelor's degree from a university of applied sciences (HBO) in addition to the successful completion of an appropriate pre-Master's programme. The requirements that the Bachelor's degree must meet are specified in Section B.
2. In the event that a candidate does not have a Bachelor's degree as referred to in Paragraph 1, the Admissions Board of the Master's programme will assess the candidate's suitability for admission to the programme on the basis of the requirements stipulated in Section B.
3. The Admissions Board can admit students who lack some prior knowledge, provided they judge that this will not reduce the student's likelihood of successfully completing the programme.
4. The Bachelor's degrees that entitle students to automatic admission are listed in Section B.
5. Additional admission requirements are stipulated in Section B.

Article A2.2 Language requirements

1. To be admitted to the programme, students must be proficient in English.
2. Proof of proficiency in English is required by the successful completion of one of the following examinations or an equivalent:
   a. IELTS overall band score of at least 6.5 no older than two years
   b. TOEFL internet based test of at least 90 no older than two years
   c. Cambridge CAE or CPE (both with an A, B, or C grade)
3. The following students are exempt from the requirement to prove their proficiency in English; students who:
   a. have obtained a relevant Bachelor's degree from an accredited academic institution in the Netherlands;
   b. have obtained a three-year Bachelor's degree in one of the following countries: Australia, Canada, Ireland, New Zealand, the United Kingdom or the United States of America) .

Article A2.3 Application and enrolment

1. The deadline for application for admission to the Master's programme is stipulated on the website www.utwente.nl/master. Different application deadlines apply to different types of applicants.
2. After admission, the student must enrol before 1 September or 1 February thereafter.

Article A2.4 Admissions Board

Each programme has an Admissions Board, which is appointed by the Dean. The Dean will appoint this board after consulting with the Programme Directors and Examination Boards of the relevant Master's programmes.

Article A2.5 Admissions procedure

1. The Admissions Board is responsible for the admissions to the programme in relation to any students that cannot be admitted directly (see Paragraph A2.1.4).
2. With a view to admission to the programme, the Admissions Board assesses the candidate's knowledge, understanding and skills, including relevant language skills. The Board may request experts from inside or outside the University to test certain types of knowledge, understanding and skills, in order to supplement written evidence from the degree programmes the student has already completed.
3. In addition to the requirements , the Board will also assess requests for admission on the basis of the following documents:
   a. motivation letter;
   b. English proficiency scores according to Art. A2.2;
   c. Diploma;
   d. transcript of records;
   e. curriculum vitae;
   f. abstract of thesis;
   g. course descriptions for programme-specific courses, research methodology courses, mathematics courses and a table of content for the course materials.

4. The Admissions Board may decide that particular units must be included in the student's study programme to compensate for lack of knowledge on the part of the student (homologation courses).
5. Candidates will receive either confirmation of their admission to the Master's programme, admission to a pre-Master's programme or a negative decision. An appeal against a decision can be lodged with the UT Complaints Desk (*UT Klachtenloket)* within six weeks.

Article A2.6 Refusal or termination of enrolment (unsuitability/judicium abeundi)

1. Based on the provisions of Section 7.42a of the WHW, the Dean or the Examination Board may, in exceptional cases, ask the Executive Board to terminate or refuse a prospective student's enrolment in a programme, if that student's actions or words show that he/she is unsuitable either for practising one or more of the professions for which the programme in question would prepare him/her or for practical preparations for professional practice.
2. If it is believed that a prospective student is unsuitable for the programme, as described in Paragraph 1, the Examination Board or the Dean will initiate an inquiry, and the student will be informed of this promptly. The Examination Board or the Dean will not issue any recommendation without carefully considering the interests involved and giving the prospective student the opportunity to be heard.

Article A2.7 Pre-Master's programme

1. The Admissions Board may decide to admit a candidate to the Master's programme on the condition that a pre-Master's programme is completed successfully before his/her admission.
2. A pre-Master's programme is a bridging programme with a study load of 15 or 30 ECs, to be decided by the Admissions Board.
3. The pre-Master's programme is assembled by the Programme Director together with the Admissions Board. A fixed programme may be defined for specific groups of students. However, a student may also be given a personalized programme.
4. Proof of the successful completion of the pre-Master's programme, together with the related Bachelor's degree, will serve as proof of admission to the relevant Master's programme, in the same and in the subsequent academic year.
5. Candidates are required to complete the pre-Master's programme within one academic year unless otherwise specified. There are two opportunities to take the examination for each part of the programme.
6. Students from Dutch Universities of Applied Sciences may be allowed to follow a pre-Master's programme during their Bachelor's programme. Paragraph 5 applies to these students. In this case, the relevant Bachelor's degree, together with the successfully completed pre-Master's programme, will serve as proof of admission to the relevant Master's programme.

A3. Programme content, structure and rules

Article A3.1 Aim of the programme

The aims and programme intended learning outcomes of the Master's programme (Article 7.13 Paragraph 2 (a) of the Higher Education and Research Act) are described in the Section B.

Article A3.2 Programme structure

1. The programme comprises the study units listed in Section B.
2. The scope of the Master's programme in ECs is 120. These 120 credits must not include any credits which have constituted part of a previously completed Bachelor's degree audit.
3. If students are required to sign up to participate in a particular study unit, this is only possible during the periods designated for that purpose.
4. Every Master's programme has a duration of two years, with each year divided into two semesters.
5. Every semester consists of two periods of ten weeks of education.
6. Master's programmes are taught on a full-time basis.

Article A3.3 Language of Instruction

1. The language of instruction for all Master's programmes is English.

Article A3.4 Exemptions

1. Upon receiving a written request from a student, the Examination Board may exempt the student from taking one or more examination components, if the student:
   a. has successfully completed a course component as part of a previous university or higher professional education programme that is equivalent in terms of both content and level; or
   b. has demonstrated through his/her work and/or professional experience that he/she has sufficient knowledge and skills with regard to the relevant course component.
2. Students may be exempted from the requirement to participate in practical exercises if they can demonstrate that they have reason to believe that doing so will give rise to a moral dilemma. In such cases, the Examination Board will decide whether the component can be carried out in another manner to be determined by the Board.
3. Exemptions may be granted to a maximum of 30 EC. The Examination Board may in extraordinary circumstances decide to grant exemptions in excess of 30 EC.
4. If an exemption is granted, the examination board can decide that the course in question must be substituted by another course so that the total number of credits achieved in the programme remains at least 120 ECs..

Article A3.5 Flexible degree programmes

1. The Examination Board for the Master's programme decides whether a student may take part in a flexible degree programme as stipulated in Section 7.3d of the WHW. The Examination Board assesses whether the programme is appropriate and consistent within the domain of the programme and whether the level is high enough in relation to the programme intended learning outcomes.
2. The content of the flexible degree programme is determined and motivated by the student and must be equivalent to a regular Master's programme in terms of scope, breadth and depth.
3. The following requirements must be met in order to be eligible for the Master's degree:
   a. the deviation from the regular Master's programme should be at least 30 ECs while still ensuring coherence in terms of content;

b.   the level of the programme must match the objectives and programme intended learning outcomes that apply to the programme for which the student is enrolled.

Article A3.6 Combined programmes

A student can obtain diplomas for two UT Master's programmes on the basis of a combined study programme that satisfies the requirements of each individual programme, including the programme intended learning outcomes.

The following requirements apply to the composition of combined programmes:

1.   The student's programme of courses represents an amalgamation of two separate study programmes and satisfies the requirements relating to the programme intended learning outcomes of both corresponding Master's programmes. Depending on the requirements of the two Master's programmes, there are three possibilities:
    a.   A **combined final project** and **combined internship**, whereby both study programmes also incorporate a **maximum of 20 ECs from common courses**.
    b.   A **combined final project,** but with a **separate internship or no internship**, whereby both study programmes also incorporate a **maximum of 30 ECs from common courses**.
    c.   **Two separate final projects**, with a **separate internship or no internship**, whereby both study programmes incorporate a **maximum of 30 ECs from common courses**.
2.   The combined programme as described in paragraph 1 includes not only study units that are part of both Master's programmes, but also courses for which an exemption has been granted for one Master's programme on the basis of results achieved as part of the other programme.
3.   If a single combined final project is included in and is relevant to both Master's programmes, as referred to in 1a and 1b, the study load of the final project should be at least 100% of the requirement in ECs for the final project of the programme that has the highest number of ECs plus at least 50% of the requirement in ECs for the final project of the other programme.
4.   If a single combined internship is included that satisfies the requirements of both programmes as referred to in 1a, the study load of the internship should equal the load of the internship with the highest number of ECs.
5.   Approval for the combined study programme is required from the Examination Boards of both Master's programmes.

Passing the final degree audit for a combined programme
Students who complete a study programme as described above take a combined final degree audit which they will pass if the assessments included in their file would result in a pass for the final degree audit of both programmes individually in accordance with the applicable regulations. The Examination Boards of the programmes involved will decide whether a student will pass the final degree audit. The Programme Board will provide instructions concerning the date of a combined final colloquium.

Article A3.7 Master's final Project

1.   Requirements for starting the final project:
    a.   Students must have no more than 10 ECs still to complete, other than the final project;
    b.   As an exception to the rule above, if the programme allows for a combined final project and internship, 10 ECs in unfinished courses other than the internship and final project are allowed.

2. The student and examiner(s) must agree on the start date and completion date for the Master's final project.
3. This agreement is to be documented in a plan that takes into account the nominal length of the final project, a reasonable holiday period and any uncompleted study units.
4. The timetable for completion must be approved by the supervisor and signed by the student.
5. The Final project is concluded with an oral presentation in public at the University of Twente, unless the project is carried out at another university as part of the exit year of a double degree programme.
6. Programme-specific regulations regarding the final project are stipulated in Section B.

Article A3.8 Composition of the assessment committee for the Final Project

1. The assessment committee is formed by a minimum of two examiners. The committee is chaired by an associate or full professor from the student's chair. The daily supervisor is a member of the assessment committee. One of the two examiners is a member of another chair. The examiners hold the PhD degree and have completed UTQ or equivalent. The committee may also have an advisory member, for instance a company supervisor.
2. In the event that the assessment committee cannot meet the above specifications, a motivated request to the Examination Board to assign a chairman who is not a full or associate professor but is sufficiently experienced may be made by the Programme Board. The approval for the particular assignment remains valid during the academic year in which the request was granted.

Article A3.9 Internship

1. The internship is a period of study-related professional practice amounting to 20 ECs and is carried out by the student at a company, university or organization outside the University of Twente.
2. Requirements for starting the internship:
    a. students must already have obtained at least 45 ECs of their examination programme;
    b. additional requirements may apply for each programme, which will be stipulated in Section B where applicable.
3. A description of the internship must be drawn up and approved by a member of UT staff appointed as examiner. This approval must be obtained before commencing the internship.
4. The student must register with the EEMCS Internship Office at least three months before starting his/her internship.
5. The daily supervisor for the internship is the company supervisor: a member of the organization where the internship is carried out. He/she must be named in the project description, mentioned in Paragraph 3.
6. The UT supervisor mentioned in Paragraph 3 supervises the student remotely during the internship. If, in the opinion of this UT supervisor, adequate supervision by the company supervisor is not – or no longer – possible, he/she may decide to take over as the student's daily supervisor.
7. During the internship, the student will write a report about his/her work. At the end of the internship period, this report will be submitted to the company supervisor. The company supervisor will assess the report using the relevant assessment form. The assessment will be based on the supervisor's observations of the student and on the report submitted by the student.
8. The UT supervisor acts as the examiner for this unit, and will base his/her grade on the assessment made by the company supervisor, the report written by the student and a discussion with the student.

The student should submit the report to the UT supervisor within two months of finishing the internship.

Article A3.10 Confidentiality
1. The final thesis report and internship report will be made public unless confidentiality has been deemed necessary (see following Paragraphs).
2. The Programme Board may declare an internship report and/or final thesis report to be confidential for a limited period upon receiving a motivated request to do so:
   a. A confidentiality request should be made by the examiner before the start of the final project or internship.
   b. A confidential report remains accessible for the supervisor, the Programme Board, and any members of bodies with the authority to assess the quality of the grading of the entire programme.
   c. All parties mentioned in 2b are required to respect the confidentiality of the report.
3. If confidentiality is deemed necessary as described in 2, the contents of the public final thesis presentation may be adapted to avoid making public those matters that are considered confidential.

Article A3.11 Evaluation
To monitor and to improve the quality of teaching, the EEMCS MSc programmes use information about the students' learning experiences. This information is obtained from:
- Internal evaluations
  - Periodic course evaluations at the end of each course
  - Additional panel evaluations, on request from lecturer, students, or Programme Director
- External sources
  - National Student Survey (NSE)
  - National Alumni Survey
  - International Student Barometer

A4. Examinations

Article A4.1 Signing up for courses and examinations
1. Every student must sign up in SIS in order to participate in a course. It is also mandatory to register before every examination opportunity.
2. Notwithstanding Paragraph 1, any student who has correctly signed up to participate in the instruction/classes for a particular course and has been admitted will also automatically be signed up for the subsequent examination, unless the course description specifies otherwise. For each examination after that, the student has to register in SIS manually.
3. The student has the right to inspect recent model test questions or model tests, or old tests and the associated answer keys, along with the standards for assessment.
4. The test schedule must be published in the Learning Management System (LMS) at least two weeks prior to the start of the study unit.
5. The assessment schedule must include:

a. the learning objectives;
b. when and how tests will be administered;
c. the relative weighting of the tests;
d. any required minimum grade per test
e. the resit for each test (if applicable), the form of the resit, when it will take place, and any conditions for participating in the resit;

Article A4.2 Type of examination

1. The course catalogue stipulates how a study unit is to be assessed and the form of any examinations.
2. In the event that a study unit is discontinued, at least one opportunity will be provided in the year subsequent to discontinuation to take the examination(s) or parts thereof, and a transitional arrangement will be included in Section B for the subsequent period.
3. At the student's request, the Examination Board may permit a different form of examination than that stipulated in the course catalogue. The examiner may ask the Examination Board to permit a different form of examination on condition that all participants agree.

Article A4.3 Examination opportunities

1. There will be an opportunity to take written or oral tests at least twice a year. Other forms of examination can be completed at least once a year.

Article A4.4 Examination results

1. Examination results are expressed with a numerical grade or as a 'pass'/'fail'.
2. Numerical grades are given on a scale from 1 to 10, with no decimal.
3. ECs will only be awarded for the study unit if an examination has been completed with a grade of 6 or higher or a pass. No ECs will be awarded for individual components of study units and/or individual tests.
4. If a student receives more than one authorized result for the same study unit, the highest grade will apply.

Article A4.5 Oral examinations

1. Oral examinations are conducted in public, unless the Examination Board has determined otherwise in relation to a particular case.
2. If a third party wishes to be present during an oral test, he/she must submit a request to the Examination Board at least ten working days prior to the oral examination. This does not apply for graduation colloquia.
3. If the Examination Board has determined that members of the Examination Board (or an observer representing the Examination Board) are to be present during the oral examination, it will notify the examiner and the student at least one working day prior to the test.
4. For an oral examination, proof is required that the student was treated appropriately and that the assessment was reliable. This can be shown by, for instance, the presence of a second expert or a video recording of the oral examination. The assessment is documented in a form that shows that the intended learning outcomes have been assessed appropriately.

Article A4.6 Determining and announcing results

1. The result of a written examination or practical exercise is published via SIS within 20 working days. This will be done by BOZ (Office of Educational Affairs).
   a. The examiner will determine the result of a written examination within 15 working days after the examination and notify BOZ of the result.
   b. No rights can be derived from examination results published on the LMS or communicated via any medium other than SIS.
2. The result of an oral examination is made known to the student within one working day in the form of authorized proof of the result by the examiner.
3. If the result for a study unit is based on multiple tests, the date of completion of the final test will count as the examination date.
4. Should the examiner be unable to meet the terms described in Paragraphs 1 and 2 due to extraordinary circumstances, he/she must inform the Examination Board of this, providing reasons for this situation. The student is then informed of the delay by the Examination Board as soon as possible, whereby a new deadline for the result will also be made known. If the Examination Board is of the opinion that the examiner has not met his/her obligations, it may appoint another examiner to ascertain the result of the examination.
5. If a second examination is planned shortly after the first, the results of the first examination will be published at least five working days prior to the second examination.

Article A4.7 Validity period for results

1. The period of validity for the results of an examination that has been passed is indefinite, unless the knowledge or skills tested have been scientifically invalidated or are proven to have lost their relevance.
2. Test results are only valid in the academic year in which they were obtained, unless they are aggregated into an exam result.
3. The Examination Board may extend the validity of test results in individual cases at the request of the student.

Article A4.8 Post-examination discussion and right of inspection

1. The student is entitled to a justification of the results of a test from the examiner, whereby the examiner substantiates the assessment that has been given. If no collective discussion of the results is held, the student may request an individual discussion of the results with the examiner within ten working days of the publication of the results. *The discussion must take place no later than five weeks after the publication of the test results, but at least five working days prior to the next test opportunity, in the presence of the examiner or a designated substitute*.
2. The student has the right to inspect his or her work for a period of two years after the assessment.

Article A4.9 Retention of examination results

1. Written examination questions, associated details and the assessed work from written tests will be retained for a period of two years.
2. The retention period for final thesis reports is seven years.

A5 Final Degree audit

Article A5.1 Master's final degree audit

1. The Examination Board determines the result of the Master's final degree audit after establishing that the student has passed all the study units associated with the programme. The date indicated on the degree certificate (i.e. the date of the final degree audit) is the day on which the student completed the final study unit of his/her degree programme.
2. A diploma can only be awarded after the student has received formal approval for his/her study programme as described in Section B.
3. If the student wishes, he/she may submit a substantiated request in writing to the Examination Board to postpone the final degree audit, and thus to delay the awarding of the degree certificate. The student must indicate the duration of the desired postponement in any such request.
4. If the student has requested postponement on the basis of Paragraph 3, the date of the final degree audit will be the date on which the Examination Board decides that the student has passed the final degree audit subsequent to the postponement.

Article A5.2 Diploma and transcript

1. The Examination Board grants a diploma as proof that the student has passed his/her final degree audit. The Executive Board will determine the model for the diploma and add a diploma supplement to the diploma providing information on the nature and content of the Master's programme completed. The diploma supplement will be in English and comply with the European format for such diplomas.
2. The International Diploma Supplement will be appended to the certificate for the successfully completed final degree audit (WHW, Article 7.11, Paragraph 4).
3. Individuals who have successfully completed more than one component of the programme and who cannot be awarded a diploma as stipulated in Paragraph 1 will, upon request, receive a statement issued by the relevant Examination Board stating which components have been successfully completed, as well as the study units involved, the number of ECs obtained and the method of examination for the examinations taken.

Article A5.3 Cum Laude

1. The Examination Board checks whether the student has fulfilled all requirements. If the judicium *Cum Laude* ('with distinction') applies, this will be stated on the diploma and the diploma supplement.
2. The *judicium Cum Laude* can be mentioned on the Master's certificate provided the following requirements are met:
   a. The arithmetic mean of the grades for all study units of the Master's examination programme, excluding the Master's thesis (final project), is at least 8.0;
   b. Those parts of the examination programme for which an exemption was granted or which were not graded with a number are not considered when calculating the average grade;
   c. Exemptions within the examination programme may be granted to a maximum of 15 ECs;

    d.   The Master's thesis (final project) is graded at 9 or higher;

    e.   No more than one study unit of the examination programme has been graded at 6;

    f.   The study programme has been completed within 125% of the nominal duration, starting from the start date recorded in SIS.

3. In individual cases the Examination Board may grant the judicium Cum Laude even if not all requirements are met.

A6. Student counselling and study progress

Article A6.1 Study progress report

1. Every student can access his/her list of the results achieved in SIS. The student can request a certified study progress overview from the Student Services Desk if required.

Article A6.2 Academic counselling for students

1. The Dean is responsible for student counselling, which includes informing the student of study opportunities inside or outside the programme.
2. Each student is allocated a study adviser.
3. The study adviser will provide advice on study-related matters, as well as any personal problems that may affect the student's studies if the student so desires.
4. If a student wishes to exercise his/her right to specific counselling or special facilities, the student is required to contact the study adviser. The study adviser will record any agreements made with the student, and this agreement is binding on both the student and the Programme Board.
5. The following applies to the entitlement to special facilities:
    a.   there are demonstrable force majeure or personal circumstances; the student is expected to report these circumstances prior to or at the time they occur;
    b.   if necessary and possible, special dispensation for participation in examinations or tests and/or the provision of special facilities for examinations or tests will be provided. Such dispensation and additional testing opportunities can only be granted by the Examination Board.

A7. Studying with a functional impairment

1. A functional impairment is a physical, sensory or other functional disorder that might limit the student's academic progress.
2. The Study Advisor and the student will discuss the most effective facilities for the student as referred to in Article 2 of the Equal Treatment of Disabled and Chronically Ill People Act (WGB h/cz).
3. Facilities are to be aimed at removing specific barriers in the teaching programme or when it comes to taking exams. Where necessary, these facilities may be related to access to infrastructure (buildings, classrooms and furnishings) and study materials, adjustments to the form of assessment, alternative learning pathways or a customized study plan. The facilities are to ensure the student's chances of achieving the programme intended learning outcomes.

4. Based on the interview referred to in paragraph 2, the student is to submit a request for facilities to the Dean, preferably three months before the student is to participate in classes, exams and practical exercises for which the facilities are required.
5. The request is to be submitted along with supporting documentation that is reasonably necessary for assessing the request (such as a letter from a doctor or psychologist registered in the BIG register, or in the case of dyslexia from a healthcare psychologist or special education needs expert, also registered in the BIG register).
6. The faculty Dean will decide on the admissibility of the request as referred to in paragraph 4 and will inform the student and the Study Advisor of the decision within 20 working days after receipt of the request, or sooner as the urgency of the request dictates.
7. The Study Advisor will ensure that the relevant parties are informed in good time about the facilities granted to a student with a functional impairment.
8. Should the faculty Dean reject the request in full or in part, the Dean is to inform the student of the justification for the rejection and the possibilities for lodging an objection and an appeal. A written objection must be submitted in writing within six weeks after the decision has been communicated to the student. The objection is to be submitted to the objections, appeals and complaints office via the Student Services desk.
9. Should extra facilities be granted, the period of validity will also be indicated. The applicant and the Study Advisor will evaluate the facilities before the end of this period. During this evaluation, parties will discuss the effectiveness of the facilities provided and whether they should be continued.
10. If a student is dyslexic, he/she will be granted a maximum of 15 extra minutes for each hour that a test or exam is officially scheduled..

A8. Amendments, transitional arrangements, appeals and objections.

Article A8.1 Conflicts with the regulations

If any additional regulations and/or provisions pertaining to teaching and/or examinations conflict with these Teaching and Examination Regulations, the present document (Teaching and Examination Regulations) will take precedence.

Article A8.2 Administrative errors

If, following the publication of an examination result, a list of grades, or an overview of a student's progress, an error is discovered, the party discovering the error – be it the university or the student – is required to make this known to the other party immediately and to cooperate in the rectification of the error.

Article A8.3 Amendments to the regulations

1. Substantive amendments to these Teaching and Examination Regulations are determined by the Dean in a separate decision.
2. Every effort will be made to ensure that substantive amendments to these Regulations do not apply to the current academic year. Substantive amendments to these Regulations may, however, be applied to the current academic year provided the interests of students are not prejudiced within reasonable bounds, or in situations of force majeure.
3. Amendments to these Regulations have no effect on earlier decisions taken by the Examination Board.

4. Transitional arrangements are arranged in accordance to Article A8.4.

Article A8.4 Transitional arrangements; examination opportunities

1. In the case of amendments to the Teaching and Examination Regulations, the Dean may decide to put a transitional arrangement in place.
2. Any such transitional arrangement will be published in Section B.
3. The following principles will be applicable to any transitional arrangement if a Master's programme is changed:
    a. Changes to a Master's programme will be published before the start of the academic year in which they take effect.
    b. No guarantee can be given that all the study units of a Master's programme, as they existed at the time of a student's enrolment in a programme, will continue to be part of the Master's programme concerned. The version of the Master's programme most recently approved by the Dean will serve as the basis for establishing the results of the Master's examination.
4. Transitional arrangements will always specify the following:
    a. which discontinued study units are equivalent to study units or components thereof in the revised Master's programme that is included in Section B;
    b. if a study unit without practical exercises is discontinued, there will be at least one opportunity in the subsequent academic year to take a written or oral examination or to ensure assessment by some other means;
    c. if a study unit that involves practical exercises is removed from the programme, and during the subsequent academic year no opportunities are provided to complete these practical exercises, at least one study unit will be designated as a suitable replacement for the discontinued study unit;
    d. the term of validity of the transitional arrangement.
5. The transitional arrangement requires the approval of the Examination Board pursuant to the provisions of Paragraph 4.
6. In exceptional cases, and provided this works to the student's advantage, the Examination Board may allow a deviation from the number of times and the method by which examinations may be taken for a study unit that has been discontinued.

Article A8.5 Appeal and objections

Any appeals against decisions made by the Examination Board or an examiner, and any objections to decisions made by the Dean on the basis of these Regulations, must be submitted in writing to the Complaints Desk at Student Services no more than six weeks after the relevant decision has been communicated.

Article A8.6 Hardship clause

In the event of demonstrable and meaningful unreasonableness and unfairness, the Examination Board may allow exceptions to the provisions of these Regulations.

Article A8.7 Publication

The Teaching and Examination Regulations and the Rules and Regulations of the Examination Board are published on the website of the programme in question.

Article A8.8 Commencement

These Regulations take effect on 1 September 2019 and supersede the Regulations dated 1 September 2018.

SECTION B PROGRAMME-SPECIFIC SECTION

INTERACTION TECHNOLOGY

About this Section

The Teaching and Examination Regulations (TER) are subdivided into two sections (Section A and Section B), which together form the TER. Section A, which can be seen as the faculty section, includes provisions that apply to all EEMCS Master's degree programmes. Section B contains the provisions that are specific to the particular degree programme, in this case the Master's programme in Interaction Technology.

SECTION B – PROGRAMME-SPECIFIC SECTION INTERACTIVE TECHNOLOGY

B1. General provisions

Article B1.1 Definitions
Definitions additional to the ones in Article 1.2 of Section A.

a. graduation supervisor: a staff member of the Human Media Interaction (HMI) research chair, or a staff member from another research chair appointed by the programme mentor, who supervises the student's final project
b. HCID: Human Computer Interaction Design, a double degree programme within the EIT Digital Master School

B2. Programme objectives and final qualifications

Article B2.1 Aim of the Interaction Technology (I-Tech) Master's programme
The I-Tech programme aims at creating impact by envisioning, designing and evaluating cutting edge technology that takes into account the complexity of human lives and environments.

With the rise of new technologies, devices and forms of connectivity the I-Tech programme focuses on intelligent interactive systems that are capable of supporting and extending human activities. The combination of in-depth technological courses with courses on understanding human behavior and research methods in this domain provides a solid foundation for a broad cross-disciplinary perspective on research, design, and entrepreneurship. The courses provided on storytelling will help the future Interaction Technologist to share his or her research and designs with a wide variety of stakeholders.

Article B2.2 General final qualifications
The degree programme have the following general scientific final qualifications

     a. Graduates have an extensive knowledge of and understand the issues relevant to their specific field of study (i.e. domain specific final qualifications) described in Art. B2.3.
     b. Graduates can contribute to scientific research, and independently design, conduct and present the results of small-scale research.
     c. Graduates can provide an original contribution to the development and/or application of the field of study. 'Original' is understood to mean 'demonstrative of a creative contribution'.
     d. Graduates can analyse complex problems relevant to the field of study and obtain the required knowledge and information.
     e. Graduates can design, validate and implement solutions/systems in their operational context; identify and apply relevant advanced knowledge, methods and techniques from their field of study.
     f. Graduates can assess solutions/systems and their applications according to their properties and potential to solve problems even if they are new to or unfamiliar with

the situation or lack information and/or reliable information; they can use their assessment as a basis for (substantiation of) decisions.

g. Graduates understand the ethical, social, cultural and public aspects of problems and solutions in their field of study; apply this insight in their international role as scholar.

h. Graduates can work as part of and play a leading role in a team; manage and plan a development process; document development and research processes.

i. Graduates can substantiate research results, designs and applications in writing and verbally; critically assess and participate in debates regarding the same.

j. Graduates can independently acquire new knowledge and skills; reflect on trends in their field of study, responsibilities and roles and use this insight as a guide for and integrate it into their own personal development.

k. Graduates can integrate information from other disciplines into their own work if necessary.

l. Graduates take a critical approach to reading, incorporating information presented in and participating in debates regarding international scientific literature relevant to their field of study.

Article B2.3 Domain specific final qualifications

The degree programme has the following subject specific scientific final qualifications (elaborating Art. B2.2)

a. Graduates have a thorough knowledge and understanding of each of the Human Technology Interaction sub-fields listed below
    - methodology of user-oriented design, including the drafting of user requirements and user studies
    - usability engineering;
    - intelligent interaction employing techniques taken from artificial intelligence;

b. Graduates have practical experience conducting, reporting about and applying the results of scientific research in developing innovative interactive systems by using interaction technology techniques and methods.

c. Graduates can design sophisticated applications involving interactive systems that are geared to the needs of users, using state-of-the-art techniques and methods. They are able to design such applications both independently and as part of a team.

d. Graduates have knowledge of and understand various aspects of the user context of interactive systems and can based on this, communicate effectively and efficiently with users during the various phases of the development process.

e. Graduates have knowledge of and understand basic questions and research methods into human behaviour relevant to the multimodal system they develop and grasp the relevance of these fields of study to the design of interactive systems.

f. Graduates can draft, transfer, document and communicate to technical designers specifications on the basis of a knowledge and understanding of the technical aspects of interactive systems.

g. Graduates can draft, transfer, document and communicate functional specifications and technical aspects of interactive systems to end-users or clients (by storytelling and using expressive media).

h. Graduates can assess systems for Human Technology Interaction according to their technical and operational aspects, incorporating a thorough knowledge and understanding of qualitative, quantitative and numerical methods.
i. Graduates understand how interactive systems influence technological and business requirements.

B3. Further admission requirements

Admission requirements additional to the ones in Article A2 can be found in Appendix II.

B4. Curriculum structure

Article B4.1 Programme structure

1. The structure of the program consists of courses divided over six pillars, research topics, and a graduation project. The programme needs to fulfil the following requirements:
    a. Technology pillar: minimum 20 EC
    b. Understanding humans and context pillar: minimum 10 EC
    c. Research pillar: minimum 10 EC
    d. Design pillar: minimum 5 EC
    e. Impact, innovation and entrepreneurship pillar: minimum 5 EC
    f. Storytelling pillar: minimum 5 EC
    g. 201800234 Foundations of Interaction Technology (5 EC)
    h. 192199508 Research Topics (10 EC)
    i. 192199978 Final Project (30 EC)
    j. The total course programme adds up to at least 120 EC.
2. If a course loads on two pillars the amount of credits will be equally divided over both pillars.
3. Depending on the content, the Advanced courses (for an overview see Appendix I) and 192199508 Research Topics will be assigned to a maximum of two pillars in consultation with the project's supervisor.
4. Capita Selecta Interaction Technology course of 5 EC is offered to enable the student to deepen his or her knowledge in a topic of choice. The student is responsible for finding a supervisor and preparing a proposal with clear goals for this course. The supervisor should agree with the proposal before the start of the Capita Selecta Interaction Technology course. The supervisor assigns the EC to a pillar depending on the proposal of the student.
5. Students may choose to fill max two pillars with maximum 5 EC per pillar from their internship after consultation with the programme mentor and a supervisor. The decision to which pillar the EC will be assigned will depend upon the focus and content of an internship. The requirement is that a student dedicates part of an internship (and thus report) to the chosen pillar(s) and spends an adequate number of hours on the topic of that pillar. Before the internship starts an agreement needs to be made with a supervisor who will grade that part of a report.
6. Students can use their Final Project (30 EC) to assign maximum 10 EC to maximum two pillars. Maximum 5 EC can be assigned per pillar. The assignment of EC points needs to be approved by the programme mentor in consultation with the daily supervisor of the Final Project.

7. During their first quarter students have to take 201800234 Foundations of Interaction Technology and one course out of the Technology (1.a) pillar.
8. A more detailed overview of the courses and the allocation over the pillars can be found in Appendix I.
9. Students whose admission to the I-Tech programme is derived from, or constitutes a part of, their admission to a special programme within the EIT Digital Master school (HCID programme), may have a course programme which deviates from the requirements listed under 1-4. The programme for HCID students is described in Article B4.4.
10. A choice of courses becomes a course programme once it has been approved and signed by the programme mentor (Article B5). The programme mentor has the authority to refuse his approval even if the choice of units is within the limitations of these Regulations.

Article B4.2 Final Project

1. Students carry out graduation work under the supervision of a staff member of the HMI chair or a staff member from another research chair within the UT approved by the programme mentor. The following requirements must be met:[1]
   a. Students complete graduation work worth 30 EC. HCID entry students (starting in Twente) complete their graduation work at a partner university; exit students (starting at a partner) complete their graduation work in Twente.
   b. Graduation work consists of a graduation project, a graduation report, a summary of the report, and a presentation.
   c. Students may only start the graduation work with a maximum of 10 EC of unfinished courses, unless the graduation supervisor grants permission to deviate from this rule.
   d. The HMI chair takes responsibility for supervision and assessment of graduation work. For HCID students who complete their graduation work at a partner university, the supervision is a joint effort by I-Tech and the partner university; a HMI staff member always needs to approve the thesis.
   e. The graduation project description is written down as an agreement, signed by both the student and the supervisor. The supervisor signs on behalf of the Examination Board.[2]
   f. The graduation committee is formed as described in Art. A3.8 of the faculty Section of this TER.

Article B4.3 Additional Courses

1. To meet the minimum requirement of 120 EC, students are allowed to take:
   a. Courses mentioned in Appendix I.
   b. Courses from related programmes, after permission from the programme mentor

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[1] Organizational procedures are found on: https://www.utwente.nl/en/itech/programme/final-project/

[2] Forms to be found on: https://www.utwente.nl/en/itech/forms/

    c. A 20 EC internship. In addition to the rules and regulation in Art. A3.9. of the faculty Section of this TER, organizational procedures are found on: www.utwente.nl/en/eemcs/traineeship.

Article B4.4 EIT Digital Master School Human Computer Interaction Design

1. Students enrolled for the Human Computer Interaction and Design (HCID) programme of the EIT Digital Master School take a 60 EC course programme in I-Tech, which is completed to a full 120 EC course programme at one of the other participating institutions.
   a. First year HCID students in I-Tech take a 60 EC programme in I-Tech as outlined in item 2. These students continue with a second-year specialization at Royal Institute of Technology in Stockholm (KTH), University of Trento (UniTN), Aalto University, University of Paris-Sud (UPS), Technical University (TU) Berlin, or Technical University of Madrid (UPM).
   b. Second year HCID students have completed 60 EC (a first year) at Aalto University, KTH, UPM, Polytechnic University of Milan or UPS before they start their 60 EC programme in I-Tech as outlined in item 3.
   c. Both first and second year HCID students will take a double degree, one of their diplomas is the I-Tech diploma.
2. The I-Tech course programme for students with an entry year at the University of Twente needs to include the mandatory courses mentioned under HCID Entry year supplemented with other I-Tech courses to add up to 60 EC.
3. The I-Tech course programme for exit year students need to include the mandatory units mentioned under HCIT Exit year.

HCID Entry year: mandatory courses
HCID core courses:

- 201800234 Foundations of Interaction Technology (5 EC)
- 201600087 Designing Interactive Experiences (5 EC)
- 201800227 Human Centered Design (5 EC)
- 201800226 Concepts, Measures and Methods (5EC)
- 201100126 Human Computer Interaction (5 EC)

Innovation and Entrepreneurship (I&E) course for HCID students:

- 201700180 I&E Basics: Innovation and Entrepreneurial Finance EIT students (5 EC) [3]
- 201700119 Business Development Lab for EIT I (5EC)
- 201700120 Business Development Lab for EIT II (5EC)
- One of the following courses:
    - 201500008 Empirical Methods for Designers
    - 201600002 Entrepreneurial Leadership & Responsible Organizational Design (only for former CreaTe and BIT UT BSc)
    - 194105070 Information Systems for the Financial Services Industry

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[3] *HCID students who have a bachelor degree in Creative Technology from the University of Twente take a different course: 201600011 International Entrepreneurship - A Strategic Technology Perspective (5 EC). This is because these students have already taken 201600233 Innovation and Entrepreneurship as part of their bachelor programme.*

- o   201600155 Global Strategy and Business Development
- o   201800079 Sustainable Bioresource Supply Chain Management
- o   201600015 Strategic Technology Management and Innovation
- o   191612680 Computer Ethics

HCID Exit year: mandatory courses
Students in the exit year of the HCID programme need to include the following courses:

- 201800524 Research Topics EIT (4 EC)
- 201800525 I&E Study EIT (6 EC)
- 192199978 Graduation Project / Final Assignment (30EC)
- 20 EC of the following courses
    - o   192166100 Interaction Technology Project (10 EC)
    - o   201600074 Natural Language Processing (5 EC)
    - o   201600075 Speech Processing (5 EC)
    - o   201600070 Basic Machine Learning (5EC)
    - o   201600071 Advanced Machine Learning (5EC)
    - o   192320601 Multi-Agent Systems (5 EC)
    - o   201600076 Foundations of Information Retrieval (5EC)
    - o   201600083 Advanced Information Retrieval (5EC)
    - o   201600081 Advanced Natural Language Processing (5 EC)
    - o   201400180 Multisensory Design (5 EC)
    - o   Other courses after permission of the programme mentor

B5. Course programme approval

The student must complete the following steps to obtain course programme approval:

1.   Contacting the programme mentor for approval of the course programme.
   Students may complete subjects and sit interim examinations up to a maximum of 15 credits before contacting the programme mentor. It is strongly recommended for students to contact the programme mentor immediately at the start of the Master's study. At this point, permission from the programme mentor is required for a complete programme of 120 credits. The programme is written down as an agreement on the content of the course programme, signed by both the student and the programme mentor[4]. The programme mentor signs on behalf of the Examination Board.
2.   Alterations and renewed approval of entire course programme.
   After the course programme has been laid down it can be altered during executing the master's

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[4] Forms to be found on: https://www.utwente.nl/en/itech/forms/

programme, by laying down revised course programmes. This can be done until research topics and final project are started by the student.

3.   HCID students only need approval for the year spent at the UT.

4.   The completed and signed form listing the course programme must be included in the student's file at *Bureau Onderwijszaken* (BOZ, office of educational support). The student will earn the diploma if he/she completes the units of study listed in the course programme and earns results in line with the guidelines for passing the final assessment.

5.   Requirements apply to each course programme to ensure basic knowledge in the field of study. The admissions board may adjust these programme requirements on the basis of the student's prior education and training. Such an adjustment will never entail an intensification of the requirements, the programme will always have a study load of 120 credits.

6.   The total number of credits completed at the UT or at another university or research institute approved by the programme mentor, must be at least 90. The Examination Board may permit a student to deviate from this rule.

B6. Degree

Students who have successfully completed their Master's final examination are awarded a Master of Science degree. The degree awarded is stated on the diploma.

B7. Transitional and final provisions

Article B7.1 Transitional provisions

The transitional arrangements can be found in appendix III.

Article B7.2 Publication

1.   The Dean will ensure the appropriate publication of these Regulations and any amendments to them.
2.   The Teaching and Examination Regulations will be posted on the faculty and programme website.

Article B7.3 Effective date

These Regulations take effect from 1 September 2019.

APPENDIX I. COURSE APPENDIX OF THE TEACHING AND EXAMINATION REGULATIONS OF THE MASTER'S PROGRAMME INTERACTION TECHNOLOGY

PILLARS						
Technology	**Understanding Humans & Context**	**Research**	**Design**	**Impact, Innovation & Entrepreneurship**	**Storytelling**	**Other Courses** To Be Assigned To Max 2 Pillars Pending Project Proposal**
Min. 20EC	Min. 10EC	Min. 10EC	Min. 5EC	Min. 5EC	Min. 5EC	
Courses*						
201800234 Foundations Of Interaction Technology	201800234 Foundations Of Interaction Technology	201800226 Concepts, Measures And Methods	201800227 Human Centred Design	201800229 Basics Of Impact, Innovation & Entrepreneurship	201800231 Documentary Practice	201600071 Advanced Machine Learning
201600070 Basic Machine Learning	201600077 Conversational Agents	201600079 Trends In Human Robot Interaction Research	201700008 Design For Behaviour Change	201600155 Global Strategy And Business Development	201800336 Storytelling Through Oral Presentation	201100254 Advanced Computer Vision And Pattern Recognition
201600077 Conversational Agents	201500440 Design And Emotion	201100126 Human Computer Interaction	201600087 Designing Interactive Experiences	201700019 Brand Management	201800232 Storytelling Through Sound	201600080 Advanced Affective Computing
191210910 Image Processing And Computer Vision	201600074 Natural Language Processing	201300074 Research Experiments In Databases & Inf Retr	201400180 Multisensory Design	201000087 Entrepreneurial Finance	201800233 Art, Mathematics & Technology	201600081 Advanced Natural Language Processing
201600074 Natural Language Processing	201600075 Speech Processing	201500008 Empirical Methods For Designers	201800228 Mastering Tinkering	201600015 Strategic Technology Management & Innovation	201600087 Designing Interactive Experiences	201600082 Advanced Speech Processing
201600075 Speech Processing	201400180 Multisensory Design		192850830 Create The Future 10EC	201800230 Advanced Project In Impact, Innovation & Entrepreneurship		201600083 Advanced Information Retrieval
201800337 Artificial Intelligence (Self-Tuition)	201200063 Philosophy Of Technology		201500440 Design And Emotion	191612680 Computer Ethics		201600084 Advanced Conversational Agents
192320601 Multi Agent Systems	201600073 Affective Computing		201800235 Social Robot Design			201600085 Advanced Brain Computer Interfaces
201600073 Affective Computing	201600078 Brain Computer Interfacing					201600086 Advanced Human Robot Interaction
192111301 Ubiquitous Computing	201600375 Communication Technology for Global Work					192199508 Research Topics 10ec
201600078 Brain Computer Interfacing	201600073 Affective Computing					201800236 I-Tech Project 10ec (Semester)

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PILLARS						Other Courses
Technology	**Understanding Humans & Context**	**Research**	**Design**	**Impact, Innovation & Entrepreneurship**	**Storytelling**	To Be Assigned To Max 2 Pillars Pending Project Proposal**
Min. 20EC	Min. 10EC	Min. 10EC	Min. 5EC	Min. 5EC	Min. 5EC	
Courses*						
201000201 Virtual Reality	201800235 Social Robot Design					Additional Courses From Related Programmes
201800225 Tele-Interaction In Robotics						192199968 Internship 20EC
201800235 Social Robot Design						Capita Selecta I-Tech
191211060 Modern Robotics						
191210431 Engineering System Dynamics						
191210770 Digital Control Engineering						
201600076 Foundations Of Information Retrieval						
201400174 Data Science						
201600375 Communication Technology for Global Work						
201600077 Conversational Agents						

🟨	Two pillars: EC equally distributed over both pillars (2,5 EC each)
	*Courses are 5 EC unless otherwise specified
	** Courses will be assigned to max two pillars by:
	Advanced courses and I-Tech project: lecturer
	Internship and Research Topics: supervisor
	Courses from related programmes: programme mentor

APPENDIX II. ADMISSIONS APPENDIX OF THE TEACHING AND EXAMINATION REGULATIONS OF THE MASTER'S PROGRAMME INTERACTION TECHNOLOGY

The provisions in this appendix are an integral part of the Teaching and Examination Regulations of the Master's programme Interaction Technology of the Faculty of Electrical Engineering, Mathematics and Computer Science of the University of Twente and are an addition to the regulation stated in Section A and B. References to numbered articles in this appendix are references to the main text of these Regulations.

Enrolment as a student is required to sit interim examinations and to be eligible to earn the Master's diploma. In order to be enrolled, students must demonstrate that they have been admitted to the Master's programme.

Article II.1 Admission to the programme

1.	Admission to the programme can be granted only to students who meet the requirements regarding the level of their previously earned diploma's, in accordance with the provisions of Art.7.30b of the WHW.
2.	Students in possession of a diploma which shows that they have passed the final examination for the Technical Computer Science or Computer Science & Engineering (TU/e, TUD, UT), *Informatica* (RUG, UU, UvA, VU, UL, RU, OU), Business & IT (UT), Creative Technology (UT), Electrical Engineering (UT, TUD, TU/e) or (*Technische*) Kunstmatige Intelligentie (RUG, UvA, UU, RU) Bachelor's programme will be eligible for admission to the programme.
3.	Students who are admitted to the HCID-programme are also admitted to the Interaction Technology programme.
4.	Students who are not in possession of the diploma mentioned in Article II.1.2 will require a certificate of admission issued by the Admissions Board. The Admissions Board is appointed by the Dean with the power to act in matters of admission to the programme. Admission involves an assessment of the student's eligibility for the Master's programme of his/her choice. If the admissions board positively assesses an application for admission, it issues a certificate of admission. Students with a certificate of admission are eligible for enrolment by the Central Student Administration. Enrolment will only take place if the other admission requirements maintained by the UT have also been satisfied.
5.	Admission of students with an international degree. In addition to the requirements in Article A2.6 and A2.8, the following criteria apply:
    a.	The level of education in the country, in which the student has completed his/her pre-university education, must be comparable with that in the Netherlands.
    b.	Level of knowledge: the student must have accumulated sufficient knowledge on the basis of the courses he/she has studied abroad to be at a level comparable to that of Dutch students who are admitted to the Master's programme.

Article II.2 Admission to the programme pursuant to a regulation

The Dean has adopted the following provisions for certain students to be eligible for admission (in addition to the ones mentioned in Article II.1).

1. Applicants who satisfy the following two requirements are eligible for admission to the I-Tech Master's programme.
    a. The applicant is holder of a diploma of a University of Applied Sciences (HBO) demonstrating that he has satisfied the requirements of the final assessment of the Computer Science (*Informatica*) HBO Bachelor's programme, the HBO ICT Bachelor's programme, the Technical Computer Science (*Technische Informatica*) HBO Bachelor's programme or the Electrical Engineering (*Elektrotechniek)* Bachelor's programme.
    b. The applicant has successfully completed the "Kies op Maat" transfer minor for Interaction Technology
2. Applicants who satisfy the following two requirements are eligible for admission to the I-Tech Master's programme.
    a. The applicant is holder of a diploma from the University of Twente demonstrating that he or she has satisfied the requirements of the final assessment of the Psychology Bachelor's programme.
    b. The applicant has successfully completed the programming theory and project part of the Software Systems module of the Technical Computer Science (TCS) Bachelor's programme or 201500533 Python Programming AND Mathematics for I-Tech (5EC).
3. Applicants who satisfy the following two requirements are eligible for admission to the I-Tech Master's programme.
    a. The applicant is holder of a diploma from the University of Twente demonstrating that he or she has satisfied the requirements of the final assessment of the Industrial Design Bachelor's programme.
    b. The applicant has successfully completed the programming theory and project part of the Software Systems module of the TCS Bachelor's programme or 201500533 Python Programming.

Article II.3 Admission to the Master's programmes after individual assessment

In all other instances than those mentioned in Art. II.1 and II.2., the admissions board conducts a detailed assessment of the applicant's eligibility for admission. This assessment takes the following factors into account:

1. the highest diploma earned by the applicant: This must be at least a Bachelor's diploma from a recognized higher education institution. If such a diploma cannot be produced, the admissions board will ask for a statement attesting to the equivalency of the applicant's qualifications with the Bachelor's diploma required. The body issuing this statement must be authorized to do so.
2. the nature of the degree course and the content of the course programme completed by the applicant, the speed with which the course programme was completed and the marks earned: The nature of the degree course, content of the course programme and marks earned for the individual units of study must clearly demonstrate that the applicant has the fundamental academic skills and appropriate basic knowledge for the Master's programme or is able to compensate for any gaps in basic knowledge.
3. the student's motivation for applying for admission
4. the applicant's command of English: This only applies to international students. The threshold values for sufficient command of English are in Article A2.2.

Article II.4 Variations in admission decisions

1. <u>Issuing an unconditional certificate of admission</u>

The admissions board may decide to admit applicants to the Master's programme after assessing their file. These applicants will be issued a (unconditional) certificate of admission.

2. <u>Issuing a conditional certificate of admission</u>

The admissions board may not reach a final decision about admission, because it finds insufficient or formally incorrect evidence of the applicant's status in the application file. In such a case the board can decide to admit the applicant conditionally. The student can enrol at the UT on the condition he or she submits the evidence lacking in the original application file to the satisfaction of the admissions board. (A typical case of conditional admission is when the applicant's file shows no formal proof of sufficient proficiency in English.)

3. <u>Issuing a certificate of pre-Master admission</u>

In some cases, the admissions board will issue applicants a certificate of pre-Master admission. While these individuals may enrol at the UT, they are not entitled to sit interim examinations or to have the final assessment conducted.

Students with a certificate of pre-Master admission must first successfully complete the pre-Master's programme before being fully admitted to the Master's programme and become fully enrolled students with all the associated rights. Certificates of pre-Master admission are valid for a limited term (generally one year). Students who are not fully admitted during this term must re-apply for admission.

Completing a programme to convert a pre-Master admission to 'fully admitted' student status is often referred to as 'overcoming deficiencies'.

Students who completed their pre-Master's programme will be issued a certificate allowing them to enter the Master's programme.

4. <u>Issuing a certificate of admission with additional requirements</u>

The admissions board may attach additional requirements to a certificate of admission (also to conditional and pre-Master admissions). These additional requirements do not impact the right to enrol, sit interim examinations or have the final assessment conducted. They do, however, impact the regulations governing successful conclusion of the Master's programme final assessment. With this admission decision, the admissions board establishes additional requirements for the course programme to satisfy in order to successfully pass the Master's programme final assessment. Naturally, the additional requirements will be limited to the extent that the student will still be able to complete the programme with a study load of 120 credits. The additional requirements placed on the course programme are referred to as "homologation".

5. <u>Issuing a certificate of admission with a requirements waiver</u>

Article A3.4 of the Teaching and Examination Regulation stipulates that the Examination Board may not honour requests for exemptions based on results earned as part of a Bachelor's programme. However,

the Examination Board may waive a requirement placed on the course programme in recognition of the results earned as part of a Bachelor's programme and, consequently, permit the student to successfully pass the Master programme's final assessment with a course programme that does not satisfy all the formal requirements. Students who wish to have a waiver for requirements placed on the course programme based on their undergraduate education should submit a request to the admissions board. The admissions board will render a decision on the request on behalf of the Examination Board. If granted, it will issue a certificate of admission with a waiver for requirements, thereby granting the student the right to have the Master's programme final assessment conducted without meeting all the formal requirements. Such a waiver will never affect the Master's programme study load. A study load requirement of less than 120 credits is not permitted.

APPENDIX III. TRANSITIONAL ARRANGEMENTS APPENDIX TO THE TEACHING AND EXAMINATION REGULATIONS FROM THE HMI EXAMINATION PROGRAMME TO THE INTERACTION TECHNOLOGY EXAMINATION PROGRAMME.

The regulations in this appendix are an integral part of the Teaching and Examination Regulations of the Master's programme Interaction Technology of the Faculty of Electrical Engineering, Mathematics and Computer Science of the University of Twente. References to numbered articles in this appendix are references to the main text of the Teaching and Examination Regulations. Regulations with a passed validity date can be found in previous Teaching and Examination Regulations.

In general students with an approved programme are allowed to finish their programme under the previous conditions taking into account the current and previous transitional arrangements that might apply to them.

1. Regulation 2019-2020 introduction of Interaction Technology
   Occasion: Change from Human Media Interaction to Interaction Technology
   Contents of the Regulation:
   a. Students who started under the HMI examination programme are able to complete this programme until 31 August 2023.
   b. Students who started under the HMI examination programme and want to transfer to the I-Tech examination programme as of 1 September 2019 have to contact the programme mentor. The programme mentor will compare the modified course list with the mandatory courses in the different pillars in I-Tech with regards to feasibility. If deemed feasible the student will be allowed to transfer.
   c. If a course included in their approved programme changed or was discontinued, students need to contact the programme mentor for a replacement.
   d. In case a student already obtained a grade for a discontinued course, and the grade was insufficient, the student has to choose another course that will replace the discontinued course.