

TEACHING AND EXAMINATION REGULATIONS

MASTER'S DEGREE PROGRAMMES EEMCS

- A. FACULTY SECTION
- B. PROGRAMME-SPECIFIC SECTION

2017-2018 academic year

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

General

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 degree programmes. Section B contains the provisions that are specific to the particular degree programme.

TABLE OF CONTENTS

Section A: faculty section.....	5
1. General provisions	5
Article 1.1 Applicability of the Regulations.....	5
Article 1.2 Definitions.....	5
2. Previous education and admission	7
Article 2.1 Previous education	7
Article 2.2 Language requirements.....	7
Article 2.3 Application and enrolment.....	8
Article 2.4 Admissions Board	8
Article 2.5 Admissions procedure	8
Article 2.6 Refusal or termination of enrolment (unsuitability/judicium abeundi).....	8
Article 2.7 Pre-Master's programme	9
3. Degree programme content, structure and rules.....	9
Article 3.1 Aim of the programme	9
Article 3.2 Programme structure	9
Article 3.3 Language of Instruction	10
Article 3.4 Exemptions	10
Article 3.5 Flexible degree programmes	10
Article 3.6 Double / combined programmes	10
Article 3.7 Master's final Project.....	11
Article 3.8 Internship.....	11
Article 3.9 Confidentiality	12
Article 3.10 Evaluation	12
4. Examinations.....	13
Article 4.1 Signing up for courses and examinations.....	13
Article 4.2 Type of examination	13
Article 4.3 Examination opportunities	13
Article 4.4 Examination results	13
Article 4.5 Oral examinations.....	14
Article 4.6 Determining and announcing results	14
Article 4.7 Validity period for results	14
Article 4.8 Post-examination discussion and right of inspection.....	14

Article 4.9 Retention of examination results	15
Article 5 Final Degree audit.....	15
Article 5.1 Master's final examination	15
Article 5.2 Diploma and transcript	15
Article 5.3 Cum Laude	15
6. Student counselling and study progress	16
Article 6.1 Study progress report.....	16
Article 6.2 Academic counselling for students.....	16
7. Studying with a functional impairment	16
8. Amendments, transitional arrangements, appeals and objections.....	17
Article 8.1 Conflicts with the regulations.....	17
Article 8.2 Administrative errors.....	17
Article 8.3 Amendments to the regulations.....	17
Article 8.4 Transitional arrangement; examination opportunities.....	18
Article 8.5 Appeal and objections	18
Article 8.6 Hardship clause.....	18
Article 8.7 Publication	19
Article 8.8 Commencement	19

SECTION A: FACULTY SECTION

1. General provisions

Article 1.1 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, Human Media Interaction, 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 Regulations of the Examination Board.

Article 1.2 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. **Admission 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 (interim) examinations or taking part in practical exercises;
- h. **Double degree:** two degrees awarded by two institutions of higher education that offer a joint programme; both degrees demonstrate the successful completion of this programme;
- 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 Board:** sometimes referred to as the Board of Examiners. 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;
- k. **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;
- l. **Executive Board:** Executive Board of the University of Twente;
- m. **Final examination (*examen*):** a degree programme concludes with a final examination. A final examination is deemed to have been completed successfully if the study units associated with the relevant programme have been achieved. The examination may also include an additional assessment by the Examination Board;
- n. **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.
- o. **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;
- p. **Interim examination (*tentamen*)** an assessment of the student's knowledge, understanding and skills relating to a course component. The assessment is expressed in terms of a final grade. An interim examination may consist of one or more tests (*deeltentamens*);
- q. **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;
- r. **Learning Management System (LMS):** Blackboard
- s. **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;
- t. **Master's thesis project / final project:** a component comprising literature research and/or a contribution to scientific research, which always results in a written report;
- u. **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.
- v. **Programme Board:** the committee charged by the Dean with managing the programme;

- w. **Programme Committee:** the Programme Committee as referred to in Article 10.3c WHW;
- x. **Quarter or quartile:** a part of a semester as specified in the academic calendar (*jaarcirkel*) of the university;
- y. **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;
- z. **Student:** any person enrolled for a programme in accordance with Articles 7.34 and 7.37 of the WHW;
- aa. **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;
- bb. **Study load:** the study load associated with a study unit to which an interim examination applies, expressed in terms of ECs (the study load for one academic year (1,680 hours) totals 60 ECs);
- cc. **Test:** part of an interim examination (*deeltentamen*);
- dd. **University:** the University of Twente (UT);
- ee. **WHW:** the Dutch Higher Education and Research Act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*, WHW).

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

2. Previous education and admission

Article 2.1 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 degree 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 2.2 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
 - b. TOEFL internet based test of at least 90
 - c. Cambridge CAE-C (CPE)
3. The following students are exempt from the requirement to prove their proficiency in English; student who:
 - a. are citizens or nationals of the English-speaking countries listed on the relevant page on the website of the UT (see www.utwente.nl/en/education/master/admission-requirements/international-degree/);

- b. have obtained a relevant Bachelor's degree from an accredited academic institution in the Netherlands;
- c. have obtained a three-year Bachelor's degree in one of the English-speaking countries mentioned on the website of the UT (see www.utwente.nl/en/education/master/admission-requirements/international-degree/) .

Article 2.3 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 before 1 February.

Article 2.4 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 degree programmes.

Article 2.5 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 2.1.4).
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 study programme/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. 2.2
 - 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 Master's 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 2.6 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 2.7 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 admission 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 programme 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 interim 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.

3. Degree programme content, structure and rules

Article 3.1 Aim of the programme

The aims and final attainment targets 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 3.2 Programme structure

1. The programme comprises the study units listed in Section B.
2. The scope of the degree 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 degree 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 3.3 Language of Instruction

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

Article 3.4 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.
 - c. 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.
2. Exemptions relating to a maximum of 30 ECs may be granted. The Examination Board will grant an exception in extraordinary cases.
3. If an exemption is granted, 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 3.5 Flexible degree programmes

1. The Examination Board for the degree 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 final attainment targets of the programme.
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. a deviation from the regular Master's programme of at least 30 ECs while ensuring coherence in terms of content
 - b. the level of the programme must match the objectives and final attainment targets that apply to the programme for which the student is enrolled

Article 3.6 Double / combined programmes

A student can obtain diplomas for two UT Master's programmes on the basis of a combined course programme that satisfies the requirements of each individual programme, including the final attainment targets.

The following requirements apply to the composition of combined programmes:

1. The student's programme of courses represents an amalgamation of two (possibly) separate course programmes and satisfies the requirements relating to the final attainment targets of both programmes. Depending on the requirements of the two programmes, there are three possibilities:
 - a. A **combined final project** and **combined internship**, whereby both programmes incorporate a **maximum of 20 ECs from common courses**. This includes not only study units that are part of both course programmes, but also courses for which an exemption has been granted for one course programme on the basis of results achieved as part of the other course programme.

- b. A **combined final project**, but with a **separate internship or no internship**, whereby both programmes incorporate a **maximum of 30 ECs from courses common to both programmes**. This not only includes study units that are part of both course programmes, but also courses for which an exemption has been granted for one course programme on the basis of results achieved as part of the other course programme.
 - c. **Two separate final projects**, with a **separate internship or no internship**, whereby both programmes incorporate a **maximum of 30 ECs from courses common to both programmes**. This not only includes study units that are part of both course programmes, but also courses for which an exemption has been granted for one course programme on the basis of results achieved as part of the other course programme.
2. If a single final project is included that is relevant to both course 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 graduation project of the other course programme.
 3. If a single 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.
 4. Approval for the combined course programme is required from the Examination Boards of both programmes.

Passing the final assessment for a combined programme

Students who complete a course programme as described above take a combined final assessment which they will pass if the assessments included in their file would result in a pass for the final assessment 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 assessment. The programme management will provide instructions concerning the date of a combined final colloquium.

Article 3.7 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. 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 the (daily) supervisor 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. Programme-specific regulations regarding the final project are stipulated in Section B.

Article 3.8 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;

- b. additional requirements may apply for each programme, which will be stipulated in Section B where applicable.
- 3. A description of the internship must have been drawn up and approved by a member of staff appointed as examiner. This approval must have been 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 a member of the organization where the internship is being completed. He must be named in the project description, mentioned in Paragraph 3.
- 6. The supervising UT staff member mentioned in Paragraph 3 supervises the student remotely during the internship. If, in the opinion of this supervisor, adequate supervision 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 daily supervisor. The daily 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 supervising UT staff member 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 3.9 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 management may declare a (final) 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 first supervisor before the start of the final project or internship.
 - b. A confidential report remains accessible for the supervisor, the programme management, 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 final thesis presentation may be adapted to avoid making public those matters that are considered confidential.

Article 3.10 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 master survey covering a whole semester or quarter
 - Subject evaluations, on request from lecturer, students, or programme director
- External sources
 - National Student Survey (NSE)
 - National Alumni Survey
 - International Student Barometer

4. Examinations

Article 4.1 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 interim 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 be signed up for the subsequent interim examination, unless the degree programme specifies otherwise.
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 assessment 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 4.2 Type of examination

1. The course catalogue stipulates how a study unit is to be concluded 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 interim 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 4.3 Examination opportunities

1. There will be an opportunity to take written or oral exams at least twice a year. Practical exercises can be completed at least once a year.

Article 4.4 Examination results

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

Article 4.5 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 met.

Article 4.6 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 the completion of one or more assignments, or on a written paper or thesis, the date of submission for the final assignment, paper or thesis 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 ten working days prior to the second examination.

Article 4.7 Validity period for results

1. Test results are only valid in the academic year in which they were obtained.
2. The Examination Board may extend this period in individual cases at the request of the student.

Article 4.8 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. That discussion must take place at

most five weeks after the publication of the test results in the presence of the examiner or an authorized replacement.

2. The student has the right to inspect his or her work for a period of two years after the assessment.

Article 4.9 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.

Article 5 Final Degree audit

Article 5.1 Master's final examination

1. The Examination Board determines the result of the Master's final examination after establishing that the student has passed all the study units associated with the programme. The date recorded on the diploma, i.e. the examination date, is the date on which the student successfully completes the last remaining study unit.
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 declaration of the examination as 'successfully completed' and consequently also to postpone the presentation of the 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 examination date will be the date following postponement on which the Examination Board decides to declare the student as having successfully completed the final examination.

Article 5.2 Diploma and transcript

1. The Examination Board grants a diploma as proof that the student has passed his/her final examination. 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 degree 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 examination (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 interim examinations taken.

Article 5.3 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 study 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 programme may be granted totalling 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 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. In particular, a student who only violates the 125% rule due to a 'dead period' preceding his initial enrolment may issue a request to the Examination Board.

6. Student counselling and study progress

Article 6.1 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 6.2 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. demonstrable force majeure or personal circumstances;
 - b. if necessary and possible, special dispensation for participation in examinations or tests and/or the provision of special facilities for examinations or tests. Such dispensation and additional testing opportunities can only be granted by the Examination Board.

7. Studying with a functional impairment

1. In consultation with the relevant student and on the basis of an interview with the study adviser, a decision will be taken regarding which adjustments or facilities referred to in Article 2 of the Equal Treatment Act on the basis of a Handicap/Chronic Illness (*Wet gelijke behandeling op grond van handicap of chronische ziekte*) are considered the most effective for this student.

2. Adjustments are intended to redress specific disadvantages for the student when following the degree programme and/or sitting interim examinations. Where necessary, these may concern facilities pertaining to the accessibility of infrastructure (buildings, classrooms and teaching facilities) and study material, changes to examinations, alternative courses or a personalized study plan. Achieving the final attainment targets of the programme must be guaranteed when implementing changes.
3. On the basis of the interview described in Paragraph 2, the student submits a written application for the facilities in consultation with his/her study adviser. The application is submitted to the Dean of the Faculty, preferably three months before the student is to participate in the classes, examinations and tests for which the facilities are required.
4. The request is to be submitted along with the supporting documentation that is necessary in order to assess 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 included in the BIG register).
5. The Dean of the Faculty makes a decision, within twenty working days of receiving the application or earlier if the urgency of the application necessitates it, regarding the validity of the application described in Paragraph 4, and will inform the student and the study adviser of his/her decision.
6. The study adviser ensures that the relevant parties are informed well in advance about the facilities granted to the relevant student.
7. Should the Dean of the Faculty turn down the application in full or in part, the Dean will inform the student of the reason for this and of the opportunity to lodge an objection or an appeal. Objections must be submitted in writing within six weeks of the decision being made known to the relevant party. Objections must be submitted to the Complaints Desk at Student Services.
8. Should extra facilities be granted, the decision will state for which periods of time this grant will apply. The applicant and the study adviser will evaluate the facilities before the end of this period of time. During this evaluation, the parties will discuss the effectiveness of the facilities provided and whether they should be continued.
9. If additional time for a test is granted, such as for students with dyslexia, an additional period of 15 minutes for every regular hour of the test is allowed.

8. Amendments, transitional arrangements, appeals and objections.

Article 8.1 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 8.2 Administrative errors

If, following the publication of an interim 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 8.3 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 8.4.

Article 8.4 Transitional arrangement; 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 degree programme is changed:
 - a. Changes to a degree 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 degree programme, as they existed at the time of a student's enrolment in a programme, will continue to be part of the degree programme concerned. The version of the degree programme most recently approved by the Dean will serve as the basis for establishing the results of the Bachelor's examination.
- 4) Transitional arrangement will always specify the following:
 - a. which discontinued study units are equivalent to study units or components thereof in the revised degree programme that is included in Section B;
 - b. if a study unit without practical exercises is removed from the programme, there will be at least two opportunities 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 interim examinations may be taken for a study unit that has been discontinued.

Article 8.5 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 8.6 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 8.7 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 8.8 Commencement

These Regulations take effect on 1 September 2017 and supersede the Regulations dated 1 September 2016.

SECTION B: PROGRAMME-SPECIFIC SECTION

BUSINESS INFORMATION TECHNOLOGY

TABLE OF CONTENTS

1. General provisions	3
Article 1.1 About this Section	3
2. Programme objectives and final attainment targets.....	3
Article 2.1 Aim of the programme	3
Article 2.2 Programme Intended Learning Outcomes.....	4
Article 2.3 Didactic concept	5
3. Further admission requirements	6
Article 3.1 Additional admission requirements	6
4. Curriculum structure.....	7
Article 4.1 Composition of programme	7
Article 4.2 Core courses	8
Article 4.3 Enterprise architecture (EA) specialization	8
Article 4.4 IT Management and Innovation (ITMI) specialization.....	8
Article 4.5 Data Science & Business (DSB) specialization	9
Article 4.6 Electives	9
Article 4.7 Research Topics	11
Article 4.8 Final Project	11
5. Approval of programme.....	12
6. Degree.....	12
7. Transitional and final provisions	12
Article 7.1 Transitional provisions.....	12
Article 7.2 Publication	12
Article 7.3 Effective date.....	12

1. General provisions

Article 1.1 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 Business Information Technology.

2. Programme objectives and final attainment targets

Article 2.1 Aim of the programme

1. The primary goal of the Master's programme on Business Information Technology (MBI) is to provide graduates with a combination of academic and professional skills and specialized technical knowledge that will enable them to analyse, design, validate and implement advanced ICT systems in their usage context. The students are trained to participate in and contribute to research in the field and international developments in and related to the field in scientifically, ethically and socially sound ways.

The Master's programme offers a stimulating and challenging research-oriented environment in which the following secondary goals are achieved:

- a. Students acquire comprehensive knowledge and insight and develop their professional and academic skills based on initiative and personal responsibility for the learning process.
- b. Students develop an investigative and reflective attitude.
- c. Students acquire an understanding of and gain experience in methods and techniques to be able to model and describe systems and their properties.
- d. Students acquire knowledge of, insight into and experience with requirements identification, design, validation and implementation of ICT systems. They learn to use this knowledge, insight and experience in their search for meaningful and promising alternatives and for making well-considered choices.
- e. Students acquire knowledge of, insight into and experience with requirements identification, design, validation and implementation of business networks. They learn to use this knowledge, insight and experience in their search for meaningful and promising alternatives and for making well-considered choices.
- f. Students develop an attitude that promotes constructive criticism whereby choices are substantiated and discussed.
- g. Students work in a team and contribute to the application and/or development of theory, methods, technologies and tools for the development of ICT systems taking into account their usage context.
- h. Students gain experience to function in complex dynamic situations in which the relevant information is not always immediately and fully available.

To further activate their education (with cases, research assignments and discussion of the research, developments and literature in the field), students are encouraged to follow developments in the field and can directly and independently coordinate their personal progress towards these developments.

The goal of the Master's programme is to enable the graduates with the aptitude and proven talent for academic research to continue their education with doctoral research.

The Master's programme on Business Information Technology has a particular emphasis on innovative developments and the integration and optimisation of business processes and ICT. The programme focuses on acquiring comprehensive knowledge and insight, as well as gaining experience in the integrated development of organizations and their business processes and ICT systems, and related theories and concepts. Methods and technologies, as well as the analysis, evaluation and modelling of both functional and qualitative properties, are important aspects of the programme. Based on solid knowledge and an understanding of the life cycle of ICT systems in their business context, the Master students develop the skills and insight required to manage innovative development processes in an architectural framework and in an environment of internationally-oriented business networks. Insight into the current research in this area is promoted in a number of different ways. Students of the Master's programme develop a constructive critical and reflective attitude by analysing research and design activities, both their own and of others.

Article 2.2 Programme Intended Learning Outcomes

The Master of Science programme on Business Information Technology prepares students to occupy a leading position in the field of Information Systems (IS). Knowledge in the field of management and IT is the very core of their preparation. The Master graduates are capable of integrating and applying this knowledge in the broad context of organizational practice, and have also at their disposal well-developed skills in communication, interpersonal relations and group work. Finally, the Master graduates possess the special skills needed for a successful career future, for example, knowledge of IT and organizations, a critical attitude and a disposition towards lifelong learning and innovation.

The Programme Intended Learning Outcomes:

1 Business-IT alignment knowledge and skills

- 1.1 The graduate understands, and can act upon, the concept of business innovation, including the interaction between IT innovations and innovations in business processes and business organization.
- 1.2 The graduate understands and is able to assess the short and long-term impact of the business strategies on both the effectiveness and the efficiency of IT
- 1.3 The graduate is capable of developing business strategies and business information system strategies, and operationalizing them in an architectural framework.
- 1.4 The graduate can apply the conceptual framework of Enterprise Architecture to improve business-IT alignment.
- 1.5 The graduate knows how to apply methods and techniques for the integrated development of business processes and business information systems, by making a reasoned selection, by communicating the principles and by contributing to their further development.
- 1.6 The graduate knows how to apply information systems methods and techniques like requirements analysis, resource management & planning, architectural design, implementation and administration for alignment and life cycle management of information systems.
- 1.7 The graduate has competences from at least one of the specializations of the BIT master programme:
 - 1.7.1 ITMI: The graduate is capable of applying IT in projects in organizations to improve business performance.
 - 1.7.2 DSB: Graduate is capable of analyzing and interpreting large amounts of data to make business decisions, such as reconfiguration of organizations and their IT infrastructure.
 - 1.7.3 EA: The graduate is capable of designing IT systems to effectively support business processes, strategy and mission.

2 Scientific approach

- 2.1 The graduate can independently systematically apply the design cycle (analysis, design, implementation, evaluation and reflection) to complex IT and business problems, by selecting and applying theories from different disciplines if necessary.
- 2.2 The graduate can independently systematically design and execute a research plan (literature research, problem analysis, formulating hypothesis, design and execution research plan, data analysis, report, conclude) crossing different disciplines or fields if necessary and to contribute to the scientific research.
- 2.3 The graduate has MSc level knowledge of and is able to apply research methodology and research ethics, in the areas of both social science research and design research.
- 2.4 The graduate can apply creative and critical thinking, reflection and argumentation.
- 2.5 The graduate is capable of independently acquiring new knowledge and skills from different disciplines.

3 Professional skills

- 3.1 The graduate can cooperate, discuss and report in written and verbal ways, in English, in both a professional and a research setting, and is aware of the differences between these settings.
- 3.2 The graduate is capable of working as part of a (multi-disciplinary) team in different roles, as member or leader, in terms of sharing responsibilities, applying time management, and planning resources and reporting, and is aware of group dynamics in development projects.
- 3.3 The graduate is capable of functioning as a professional in and between different disciplines/fields.
- 3.4 The graduate is capable of setting up and leading a (simple) enterprise.

4 Taking account of Social and Temporal context

- 4.1 The graduate is capable of analyzing and discussing ethical, social, cultural and societal aspects of problems, solutions and developments and their consequences in the field.
- 4.2 The graduate can value differences between cultures and can learn from these.

Article 2.3 Didactic concept

The didactic concept of the MBI programme is based on the three "O's" that characterize the University of Twente's academic programmes: Research ('Onderzoeken'), Design ('Ontwerpen') and Organization ('Organiseren'). The University of Twente also encourages a multidisciplinary approach and provides ample room for internationalization. An entrepreneurial attitude and an emphasis on designing solutions for complex problems complete our university's profile. As a consequence, the didactic concept that lies at the heart of this Master's programme can be characterized as being a mixture of (1) knowledge development in the classical sense, (2) integration of this knowledge in project-based courses and (3) the weaving of several lines of learning between individual courses.

Concerning more specifically the research aspect, this programme prepares the students to operate at the level of junior researcher by familiarizing them with the Design Science paradigm, as introduced by Hevner, March, Park & Ram¹. This is a scientific paradigm that aims at increasing human and organizational capabilities through the creation of new and innovative artefacts. Within this paradigm,

¹ Hevner, A., March, S., Park, J., & Ram, S. (2004). Design science in information systems research, *MIS Quarterly*, 28(1), 75-105.

the building and application of the newly designed artefacts creates knowledge and understanding of the problem domain as well as of the ways of solving problems.

3. Further admission requirements

Article 3.1 Additional admission requirements

A request to be admitted to the programme is assessed by the MBI Admission Committee. In addition to the general criteria, the MBI Admission Committee distinguishes two types of (inter)national education:

1. Research Universities (offer more research-oriented programmes);
2. Universities of Applied Sciences (prepare students for more practical jobs).

The assessment of all applicants' skills is based on their academic background. The MBI Admission Committee has specific requirements depending on the degree of the applicants. Knowledge gaps can be repaired during a pre-master's programme, which should be successfully completed before the student is admitted to the master's programme. In case the knowledge gap is limited, repair can happen during homologation courses incorporated in the Master's programme.

The MBI Admission Committee determines the duration and content of the pre-master's programme and/or homologation courses. As a general guideline, the study load of the homologation courses should not exceed 15 EC.

The regulations for the different educational backgrounds are:

1. Dutch Research University Degree

1. A Bachelor's degree awarded by a Dutch university.

Applicants with a Bachelor's degree other than Business & IT or Information Science in a related field awarded by a Dutch university are eligible for admission depending on the contents of their Bachelor's programme. Concerning English proficiency and possible homologation courses, the Admission Committee decides for each applicant whether additional requirements should be set or a proficiency test should be taken.

2. A Bachelor's degree awarded by the University of Twente:

- a. Applicants with a Bachelor's degree in Business Information Technology are directly admitted to the programme.
- b. Students who have completed a Computer Science and Engineering(TCS) or Industrial Engineering & Management science (TBK) are directly admitted to the programme. They will have to follow some homologation courses that are incorporated in their Master's programme.
- c. Applicants with a Bachelor's degree other than BIT, TCS or TBK, awarded by *the University of Twente* may be admitted to the programme after completion of their Bachelor's and a pre-master's programme.

2. Degree from a University of Applied Sciences (HBO)

Students with a Bachelor's degree in a related field awarded by a HBO may be admitted to the programme after completion of their Bachelor's and a pre-master's programme.

The Admission Committee determines whether or not a pre-master's is awarded, based on:

- Academic record;
- Content of the Bachelor's programme;
- Proficiency in Mathematics B at pre-university education level (*Dutch: VWO*);
- Proficiency in English at pre-university level (*Dutch: VWO*);
- CGPA of at least 70%;
- Curriculum Vitae;
- Letter of motivation.

The following degrees are currently considered to be in a related field:

- Information Technology ('*Informatica*');
- Business IT & Management ('*Bedrijfskundige Informatica*').

3. Non-Dutch University Degree

The MBI Admission committee assesses international applicants with a Bachelor's degree awarded by a foreign Research University or University of Applied Science on an individual basis. The assessment of the applicant's competences is based on:

- Academic record;
 - NUFFIC credential evaluation;
 - Content of the degree (field related);
- Quality of level of Bachelor's programme;
- CGPA of at least 75% (3.0 on a 4-scale);
- English proficiency test report;
 - IELTS score with an overall band score of 6.5 or higher, or a
 - TOEFL internet-based (TOEFL-iBT) score of at least 90;
- Letter of motivation;
- Any additional information required by the Admission Committee.

4. Curriculum structure

Article 4.1 Composition of programme

The Master's programme on Business Information Technology consists of:

- Six mandatory core courses,
- Three alternative specializations with four mandatory courses each,
- Elective courses,
- Research topics,
- Final project.

The academic programme 2017-2018 is depicted in the next articles, showing the course code, course name, quartile and study load in EC.

More details are available via OSIRIS and/or are made known in a timely manner by the examiner in accordance with the provisions of Article 4, Section A.

Students can thus graduate with more than the minimum number of 120 ECs.

Article 4.2 Core courses

The choice of core courses followed from the conviction that all BIT Master's should understand the principles of IT strategy, business process management, enterprise architecture and business case development. Furthermore, all BIT Master's should understand and be able to apply the methods and techniques of design science, and should understand the principles of (computer-supported) cooperative work.

The core courses of the BIT Master's programme are the following:

Term	Code	Name	EC
M1-Q1	192350200	E-Strategizing	5
M1-Q1	192376500	Business Process Integration Lab	5
M1-Q2	201400277	Enterprise Architecture	5
M1-Q3	192320820	Design Science Methodology	5
M1-Q4	192340070	Computer Support Cooperative Work	5
M1-Q4	192376000	Business Case Development for IT-Projects	5

Article 4.3 Enterprise architecture (EA) specialization

In this specialization, courses on information systems and services have been selected. The course on Foundation of Information Systems is methodological, while the courses on Information Services, Architecture of Information Systems and Service-oriented Architecture with Web services are more system-oriented. These courses complement each other and cover the main techniques and systems for enterprise architectures.

Term	Code	Name	EC
M1-Q1	191863960	Foundations of Information Systems	5
M1-Q2	201100051	Information Services	5
M1-Q3	192652150	Service-oriented Architecture with Web services	5
M1-Q4	192320111	Architecture of Information Systems	5

Article 4.4 IT Management and Innovation (ITMI) specialization

In this specialization, courses related to the application and management of ICT in organizations have been selected, with the exception of the course on Software Management, which is oriented towards the software development process and software quality. The course on E-commerce contributes to the innovation aspect of this specialization. In this specialization, the students learn techniques that are applicable in (large) IT and software development projects.

Term	Code	Name	EC

M1-Q2	192320501	Electronic Commerce	5
M1-Q3	192360021	ICT Management	5
M1-Q3	192340101	Implementation of IT in Organizations	5
M1-Q4	192340041	Software Management	5

Article 4.5 Data Science & Business (DSB) specialization

In this specialization, courses have been selected to cover the methods and techniques necessary to prepare the students to perform business analysis by exploring and reasoning on large amounts of data.

Term	Code	Name	EC
M1-Q1	191506103	Statistics and Probability	5
M1-Q1+2	191820210	Simulation	5
M1-Q2	201200044	Managing Big Data	5
M1-Q2 / Q3	201400174	Data Science	5

Article 4.6 Electives

In addition to the 50 EC that are determined by the core and the specialization courses, the students spend 30 EC on elective courses.

In order to guarantee the scientific depth of the programme, a student can only take up an internship of 20 EC **OR** join the study tour for 10 EC. The courses listed below can be chosen by the students as elective courses. A student needs to ask for permission of the Examination Board to follow a course that is not in this list. In case a student follows a course that is not in this list without prior approval of the Examination Board, the credits from this particular course do not count in his/her programme.

Term	Code	Name	EC
ALL YEAR	201300059	Internship BIT	20
ALL YEAR	201200148	Study Tour	10
S1	192320220	Advanced Architecture of Information Systems	10
S1	191820210	Simulation	5
Q1	191863960	Foundations of Information Systems	5
Q1	192111332	Design of Software Architectures	5
Q1	192320601	Multi agent systems	5
Q1	195810200	Supply Chain Management & ICT	7,5
Q1	191506103	Statistics and Probability	5
Q1	201200008	Accounting & Financial Management	5

Q1	201400171	Capita Selecta Software Technology	5
Q1	201300075	Management of Organizations, Operations and Technological Innovation	5
S1	201200180	Seminar Digital Society in 2020 ²	5
Q2	192135450	ADSA: Model Driven Engineering	5
Q2	194108040	Business Development in Network Perspectives	5
Q2	191612680	Computer Ethics	5
Q2	192320501	E-commerce	5
Q2	201100051	Information Services	5
Q2	201200044	Managing Big Data	5
Q2	201500018	Cybersecurity Management	5
Q2 or Q3	201400174	Data Science	5
Q3	201100126	Human Computer Interaction	5
Q3	201600155	Global Strategy and Business Development	5
Q3	192652150	Service-oriented Architecture Web Services	5
Q3	192340101	Implementation of IT in Organizations	5
Q3	192360021	ICT Management	5
Q3	201500088	HRM and Technology Design	5
Q4	192320111	Architecture of Information Systems	5
Q4	192340041	Software Management	5
Q4	192360501	E-health strategies	5
Q4	194105070	Information Systems for the Financial Services Industry	5
Q4	201500038	E-law	5

Internship and international cooperation

The research groups that contribute to the MBI courses have contacts with foreign universities and research institutions. Students interested in studying abroad can make use of these contacts. For more information on studying abroad and the internship, see: <http://www.utwente.nl/en/eemcs/traineeship>

Capita Selecta

Students who want to perform a Capita Selecta in their programme have to ask permission from the Examination Board in advance. Some of the criteria the Examination Board will apply to approve a Capita Selecta are:

- The contents and objectives should not overlap too much with any of the available courses, unless following an available course is not practically possible at a certain moment.
- The Capita Selecta should contribute to the programme intended learning outcomes.
- The Capita Selecta should meet the level requirements of the programme.
- The study load for the Capita Selecta must match the number of ECs the student will obtain after completing the Capita Selecta.
- The student needs to find a suitable examiner to support the Selecta Capita Selecta proposal and supervise the learning activities.
- A Capita Selecta can only be requested when there is no other way to meet some BIT-specific training needs of the student.

Article 4.7 Research Topics

Students need to take the course Research Topics BIT (201300058) before starting the Master's final project. During this course the students get acquainted with a research area as a preparation for the Master's final project.

Term	Code	Name	EC
ALL YEAR	201300058	Research Topics BIT	10

More information on the Research Topics can be found at http://www.utwente.nl/mbit/final_project.

Article 4.8 Final Project

The Final Project is scheduled in the second semester of the second year of the Master's programme.

Term	Code	Name	EC
ALL YEAR	192399979	Final Project BIT	30

The final project is a 30-credit study activity to be completed over a half-year period, which rounds up the Master's programme. The final project is a research and/or development exercise. The final project may be developed and implemented internally (within the UT), but it may also involve a commissioned assignment from a company or another higher education institution. Some projects are performed abroad.

The final project can be seen as an individual 'Master's assessment test'. After successfully completing the project, the student demonstrates that he/she deserves the Master of Science qualification. In the final project, the student's competence in the integrated application of knowledge, comprehension and skills covered in the earlier study units is assessed. Although the assignment focuses on a specified field of study, the project is assessed on the basis of a number of well-defined generic criteria.

To conclude the project, the student submits a written report (the ‘Master thesis’) and delivers an oral presentation about the project, addressing both its implementation and the results generated. The Examination Board prescribes an assessment form for the final project to help ensure the homogeneity and transparency of the assessment.

If a student expects to exceed his intended completion date, he is required to submit a motivated request for delay to the examination board.

The final project committee consists of at least two supervisors: one from the BMS faculty and one from the EEMCS faculty, stressing the Business and IT signatures of the programme.

Further information on the final project can be found in the Final Project Manual at www.utwente.nl/mbit/final_project/.

5. Approval of programme

Students must draw up their individual study programme and have this approved and signed by the programme coordinator. The signed and approved copy must be handed in at the education administration before the third quarter of their first year.

6. 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.

7. Transitional and final provisions

Article 7.1 Transitional provisions

Notwithstanding the current Teaching and Examination Regulations, the following transitional provisions apply for students who started the programme under a previous set of Teaching and Examination Regulations:

1. Regulation 2016-2017 regarding the course 192320850 Advanced Requirements Engineering

Occasion: The course 192320850 Advanced Requirements Engineering will not be offered in 2016-2017.

Term of validity for this rule: until September 1, 2017

Students are allowed to replace the course 192320850 Advanced Requirements Engineering with the course 201400171 Capita Selecta Software Technology.

2. Regulation 2016-2017 regarding the course 192330301 Specification of Information Systems

Occasion: As of 2016 this course will no longer be offered.

Term of validity for this rule: unlimited, starting September 1, 2017

Students who need to do this course as a mandatory part of their programme will have to replace this course with 192652150 Service-oriented Architecture with Web services.

Article 7.2 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 7.3 Effective date

These Regulations enter into force with effect from 1 September 2017.