

# **TEACHING AND EXAMINATION REGULATIONS**

## **BACHELOR OF SCIENCE CREATIVE TECHNOLOGY**

A. UNIVERSITY SECTION

B. PROGRAMME-SPECIFIC SECTION

*2019-2020 academic year*

## **Introduction to the Teaching and Examination Regulations for Bachelor'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 university section, includes provisions that apply to all Bachelor's degree programmes. Section B contains the provisions that are specific to the particular Bachelor's degree programme.

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## **SECTION A: UNIVERSITY SECTION**

### **SECTION 1 – General Provisions**

#### Article 1.1 Applicability of these Regulations

1. The Teaching and Examination Regulations apply to all students who are enrolled in the educational programme in question.
2. Students attending courses offered by a different educational programme are subject to the assessment rules laid down in the relevant assessment schedule, in the TER of the relevant educational programme and in the rules and guidelines of the Examination Board of the relevant educational programme. The decision on special facilities in accordance with Article 6.2.5 may only be taken by the Examination Board of the relevant programme.
3. Each educational programme has its own programme-specific Appendix.
4. This general section of the Teaching and Examination Regulations and the programme-specific section jointly form the applicable Teaching and Examination Regulations for the relevant Bachelor's programme.
5. Both the general section and the programme-specific Appendix of the Teaching and Examination Regulations are adopted by the faculty board.
6. The institute section of the student charter includes a definition of what the University of Twente considers to be academic misconduct. The rules and guidelines of the Examination Board for the Bachelor's programme in question includes additional rules about academic misconduct, such as which measures the Examination Board may take if it establishes misconduct.
7. The rules and guidelines of the Examination Board of the educational programme includes provisions on order for tests and rules in case of emergencies.
8. The following applies to the language used in the general section and the programme-specific Appendix of the Teaching and Examination Regulations and the rules and guidelines of the Examination Board:
  - a) English versions of the programme-specific Appendix of the Teaching and Examination Regulations and the Examination Board's rules and guidelines should be available for English-taught Bachelor's programmes.
  - b) Where the programme-specific Appendix of the TER and the Examination Board's rules and guidelines are available in both Dutch and English, each version must, for the sake of clarity, state which version is binding.
  - c) An English translation of this general section is available for English-taught Bachelor's programmes. In case of uncertainty, the Dutch version of this general section is binding.
9. Requests for exemptions to provisions laid down in the Teaching and Examination Regulations may be submitted to the Examination Board or the Programme Board, depending on the subject matter. This depends on which body (Examination Board or Programme Board) is authorized or has the duty according to this regulation to take a decision on or make an exception to a provision in this regulation.
10. These regulations have been drawn up using the masculine personal pronouns 'he' and 'him' and 'his'. In these cases, 'she' 'her' and 'hers' may be substituted

## Article 1.2 Definitions

The following definitions are used in these Regulations:

- a. **Binding student progress evaluation (BSA):** A student progress evaluation as referred to in Section 7.8 (b), subsections 1 and 2 of the Higher Education and Research Act involving expulsion from the programme in accordance with Section 7.8 (b), subsection 3 of that Act, issued by the Programme Board on behalf of the institutional administration;
- b. **Compulsory holiday:** Required day off work;
- c. **Canvas:** University of Twente's digital learning environment;
- d. **Personal Circumstances Committee:** A committee convened by the institutional administration to advise the institutional administration in individual cases regarding the validity, duration and severity of a specific student's extenuating personal circumstances;
- e. **Credit:** a unit of 28 study load hours, in accordance with the European Credit;
- f. **Transfer System.** A full-time academic year consists of 60 credits, equal to 1680 hours of study (Section 7.4 of the Higher Education and Research Act);
- g. **Examination:** A degree programme is concluded with an examination. If the study units in the degree programme have been completed successfully, then the examination will be deemed to have been completed. The Examination Board may require a supplementary examination;
- h. **Examination Board:** The Examination Board is the body that objectively and professionally assesses whether a student meets the conditions laid down in the Teaching and Examination Regulations regarding the knowledge, understanding and skills required to obtain a degree;
- i. **Examiner:** The individual appointed by the Examination Board to administer examinations and tests and to determine the results, in accordance with Section 7.12 (c) of the Higher Education and Research Act;
- j. **Faculty Board:** Head of the faculty (Section 9.12 of the Higher Education and Research Act);
- k. **Honours Programme:** Institution-wide Bachelor's Honours programme;
- l. **Institution:** University of Twente;
- m. **Institutional administration:** Executive Board, except as otherwise specified;
- n. **Module:** a study unit worth 15 credits;
- o. **Module coordinator:** The individual responsible for the module, as appointed by the Programme Board;
- p. **Module-examiner:** The individual appointed by the Examination Board to determine the results of the study unit;
- q. **Module component:** Component of a module;
- r. **Study unit:** A programme component as defined in Section 7.3, subsections 2 and 3 of the Higher Education and Research Act. Each study unit is concluded with an interim examination;
- s. **Curriculum:** The aggregate of required and elective study units constituting a degree programme as laid down in the programme-specific Appendix;
- t. **Programme:** Bachelor's degree programme as referred to in the programme-specific Appendix to these Teaching and Examination Regulations;
- u. **Programme Board:** The body appointed by the Faculty Board to administer the programme;
- v. **Programme Committee:** Programme Committee as referred to in Section 9.18 of the Higher Education and Research Act;
- w. **Osiris:** System designated by the institutional administration for registration and for providing information on all relevant data related to the students and the university, as described in the Higher Education and Research Act;

- x. **Practical exercise:** A practical exercise as referred to in Section 7.13, subsection 2 (d) of the Higher Education and Research Act is a study unit or a study unit component emphasizing an activity that the student engages in, such as:
  - a) carrying out literature research, completing an assignment or preparing a preliminary design, writing a thesis, article or position paper, or giving a presentation in public;
  - b) carrying out a design or research assignment, doing tests and experiments, participating in practical classes, practicing skills;
  - c) internship, fieldwork or excursions;
  - d) participating in other educational activities deemed necessary and aimed at achieving the required skills, such as targeted practice of clinical skills in a specifically equipped skills lab;
- y. **Student:** Anyone enrolled in a programme in accordance with Sections 7.34 and 7.37 of the Higher Education and Research Act;
- z. **Study Adviser:** Person appointed by the faculty board who acts as contact between the student and the university, and in this role represents the interests of the students, as well as fulfilling an advisory role;
- aa. **Study workload:** The study workload is expressed in course credits according to the European Credit Transfer System. The study workload for one academic year is 60 credits. 60 credits is equal to 1680 hours of studying;
- bb. **Interim examination:** an investigation of students' knowledge, understanding and skills, and an assessment of the outcomes of that investigation, (Section 7.10 of the Higher Education and Research Act); an interim examination may consist of a number of tests;
- cc. **Test:** Part of an interim examination. If the interim exam for a study unit consists of a single test, then the result of that test will count as the result of the interim exam. A test can be split into components and administered during multiple sessions;
- dd. **Test result:** A result that is part of the final result for a module;
- ee. **Assessment schedule:** A schedule showing the method of assessment for a module;
- ff. **UT:** University of Twente;
- gg. **Working day:** Any day from Monday to Friday with the exception of official holidays and the prearranged compulsory holidays ('brugdagen') on which the staff are free;
- hh. **Higher Education and Research Act:** The Higher Education and Research Act (abbreviated in Dutch to WHW), Bulletin of Acts and Decrees 1992, 593, and its subsequent amendments;

The definition of all other terms used in these regulations is in accordance with the definition accorded by statute.

## SECTION 2 – ADMISSION

### Article 2.1 Prerequisites

Admission will be granted to the programme if the prerequisites for enrolment in university education have been met in accordance with the Higher Education and Research Act, Sections 7.24, 7.25 and 7.28. Further details are available on the University of Twente website<sup>1</sup>.

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<sup>1</sup> <https://www.utwente.nl/onderwijs/bachelor/toelating-en-inschrijving/> or <http://www.utwente.nl/en/education/bachelor/admission/>



## Article 2.2 Bachelor's programme language requirement for holders of a non-Dutch qualification

Applicants in possession of qualifications obtained outside the Netherlands may only enrol:

1. If the programme is taught in Dutch: after complying with the Dutch language proficiency requirement by passing the state examination in Dutch as a second language, level 2, or earning the certificate Dutch as a Foreign Language, 'Profiel Academische Taalvaardigheid' (PAT) or 'Profiel Taalvaardigheid Hoger Onderwijs' (PTHO), and
2. If the programme is taught in English: after complying with the English language proficiency requirement, involving proficiency at a level commensurate with the Dutch pre-university (VWO) exam. Passing one of the following tests also serves as proof of the required proficiency:
  - IELTS (International English Language Testing System), academic module. The minimum required IELTS score (overall band) is: 6.0;
  - TOEFL (Test Of English as a Foreign Language). The minimum required TOEFL score is: 80 (internet-based test);
  - Cambridge EFL (English as a Foreign Language) Examinations, with one of the following certificates:
    - Cambridge Certificate in Advanced English;
    - Cambridge Certificate of Proficiency in English;
3. The educational programme may impose additional requirements for Dutch or English language proficiency. These additional requirements are specified in the programme-specific Appendix.

## Article 2.3 Entrance Examination ('Colloquium Doctum')

If the applicant fails to meet the requirements set in Articles 2.1 and 2.2, the institution may provide an exemption based on an entrance examination in accordance with Section 7.29 of the Higher Education and Research Act. Further details are available on the University of Twente website<sup>2</sup>

## SECTION 3 – CONTENTS AND STRUCTURE OF THE PROGRAMME

### Article 3.1 Aim of the Programme

The aims and attainment targets (Section 7.13 subsection 2c Higher Education and Research Act) are described in the programme-specific Appendix.

### Article 3.2 Structure of the Programme

1. The programme consists of 180 credits:
  - a. In addition to a core programme of up to 120 credits, students also take minors totalling at least 30 credits and they complete a graduation phase of a total of 15 credits. The programmes Advanced Technology and Technical Medicine are an exception;
  - b. The educational programme consists of modules;
  - c. A module is a study unit of 15 credits, in which the student develops his programme-specific knowledge, skills and attitudes in a coherent manner;
  - d. A module is a study unit of 15 credits, in which the student develops his programme-specific knowledge, skills and attitudes in a coherent manner;
  - e. The programme offering the minor module may set prerequisites for admission to the minor module;

- f. The student's own programme may set conditions for the number of credits to be earned for admission to the minor module. These conditions are specified in the relevant programme-specific Appendix;
  - g. The student is limited in his choice of minor by the provisions of (e) and (f). The range of programmes can be consulted on the website <https://www.utwente.nl/onderwijs/keuzeruimte/minor/>
  - h. Generally speaking, the second semester of the third year of studies is devoted to the graduation phase (which comprises a minimum of 15 credits);
  - i. The student is to complete the core of the Bachelor's programme prior to embarking on the graduation phase;
  - j. The Examination Board<sup>2</sup> is authorized to deviate from Article 3.2.1 (f), (g) and (h) if strict adherence to those provisions would result in an unacceptable delay in study progress. In consultation with the Study Advisor, the student may submit a proposal to the Examination Board;
2. The programme-specific Appendix to these Teaching and Examination Regulations describes the degree programme in accordance with Section 7.13, subsection 2 (a to e, g, i, l, s, t, v) of the Higher Education and Research Act.

### Article 3.3 Programme's Language of Tuition

1. The educational programme's language of tuition is specified in the programme-specific Appendix;
2. If programme components deviate from the language of tuition, then this is to take place in accordance with the UT Code of Conduct for Languages of the UT and Section 7.2 of the Higher Education and Research Act;
3. Bachelor's programmes taught in Dutch will generally use study materials in English or Dutch, and study units or components of study units may be taught and assessed in English, if:
  - a. a lecturer or tutor in the unit of study does not speak Dutch, or;
  - b. students from the relevant Bachelor's programme take the module together with student's from an English-taught Bachelor's programme, or;
  - c. educational programme the degree programme considers it necessary in order to fulfil one of its aims in the area of English language communication skills.

### Article 3.4 Exemption

1. The Examination Board may grant an exemption to a student at his request for one or more full study units. To this end, the student must demonstrate completion of a component of a higher education programme that is equivalent in content, scope and level, or that he has acquired expertise and skills through work or professional experience with regard to the relevant study unit;
2. The Examination Board has the authority to make exceptions to the provision in paragraph 1 and to grant an exemption to a student for components of a study unit;
3. A student may also be exempted from practical exercises if he can demonstrate that a required practical exercise will likely give rise to a personal moral dilemma. In such cases the Examination

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<sup>2</sup> It is important that the student is still able to achieve the attainment targets of the programme. In light of this consideration, this authorization has been formally conferred to the Examination Board, as they are the ones to ensure that only students who achieve the attainment targets are able to graduate. It is conceivable that a programme / faculty may opt to confer the authorization referred to in (j) to the Programme Board.

Board will decide whether the component can be completed in another manner to be determined by the Examination Board.

### Article 3.5 Elective Programme

The Examination Board of the programme decides on requests for permission to take an elective programme as referred to in Section 7.3 (d) of the Higher Education and Research Act. The Examination Board assesses whether an elective programme is appropriate and consistent within the domain of the educational programme and whether the level is high enough in light of the attainment targets of the programme.

## SECTION 4 – TEACHING AND ASSESSMENT

### Article 4.1 General

1. The institutional administration is responsible for the practical organization of interim and other examinations;
2. Each study unit concludes with an interim examination;
3. The interim exam may consist of a number of tests<sup>3</sup>;
4. A test can be split into components and administered during multiple sessions. The results of these components are not included in Osiris but must be announced to the students through the Gradebook in Canvas;
  - a. The student has the right to inspect recent model test questions or model tests, or old tests and their keys, along with the norm for assessment;
  - b. The time allotted to administering a test may not exceed three hours<sup>45</sup>;
  - c. If the examiner wishes to use a form of assessment that takes more than three hours, he may ask the Examination Board for approval to deviate from the preceding paragraph. The request must be submitted at least four weeks before the start of the course period in order to comply with the provisions of paragraph 11 about timely notification of various aspects of teaching and testing;
5. Test results are expressed as a whole number from 1 to 10 or a number from 1 to 10 with a single decimal, or as 'pass' / 'fail';
6. Interim exam results are rounded to the nearest whole number;
7. Interim exam results are expressed as a whole number from 1 to 10. Interim exam results of 6 or higher are a pass;
8. The module examiner consults with any other examiners involved in the module prior to determining the interim exam results for the module (Article 4.2). This consultation should preferably take place during a module assessment meeting;
9. The 15 credits will be awarded only once a module has been passed. No credits are awarded for components of a module;
10. If more than one authorized result has been established for one and the same unit of study, the highest result will apply. This also applies to tests and components of tests;

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<sup>3</sup> A test may take the following forms: a written test, an assignment, an oral test, the assessment of practical exercises as referred to in Article 1.2 or a combination of the above.

<sup>4</sup> If a test consists of several components, administered during multiple sessions, the maximum time applies to each component. Article 7.1 paragraph 10 includes a provision on the maximum extra time allotted to students with dyslexia.

<sup>5</sup> An interim exam result of 5.49 is rounded down to 5 (fail). An interim exam result of 5.50 is rounded up to 6 (pass).

11. The Programme Board publishes the following details in Osiris: scope, course objectives and content of the study unit, language of tuition, language of assessment, prerequisites, required and recommended study materials, design of teaching methods and assessment.

#### Article 4.2 Modules

1. Each module has a module coordinator and a module examiner. This is preferably the same person;
2. The Examination Board appoints the examiners for the module components and a module examiner for each module.

#### Article 4.3 Registration for study units and tests

1. Registration in Osiris is required prior to participating in the study unit;
2. Upon registering for the study unit, the student will automatically be registered for the regular assessments associated with the study unit;
3. Information on registration for resits is indicated in the assessment schedule.

#### Article 4.4 Description of modules and assessment schedule

1. The programme-specific Appendix contains a description of each module
2. The module description must include:
  - a. the learning objectives of the module and the module components;
  - b. the module components;
  - c. the number of credits and weighting ratio of the module components;
  - d. the language of tuition and assessment;
3. After the module coordinator has drawn up the assessment schedule, it will be adopted by the Programme Board. The Examination Board issues its advisory opinion on the assessment schedules;
4. The assessment schedule must be published in Canvas at least two weeks prior to the start of the module;
5. The assessment schedule must include:
  - a. under which conditions the module can be passed;
  - b. how the learning objectives of the module and the module components are assessed;
  - c. the period of validity of the result of the test or tests for a module component;
  - d. when the tests are taken;
  - e. any required minimum mark per test; a minimum mark for a test may not be set higher than 5.5;
  - f. when the resit options take place and which conditions are attached to take part; each module component must offer at least one resit option within the same academic year. An exception may be made for practical exercises<sup>6</sup>;
  - g. any compensation schemes for test results within the module;
  - h. any pass-fail regulation for test results from different modules<sup>7</sup>;
  - i. the marking period for each test; this must not exceed 10 working days with due observance of Article 4.6.8 of this regulation;
6. The Programme Board may modify the assessment schedule during the study unit;

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<sup>6</sup>See the definition of terms in Article 1.2. These include projects and practical classes.

<sup>7</sup>The Examination Board has the legal right to determine that a student may pass while not have achieved only passes. This is referred to as the 'pass/fail regulation'.

- a. The assessment schedule may only be changed in consultation with the module coordinator. Students are to be informed immediately of the change;
  - b. If the change involves nothing more than moving tests or test components to a timeslot other than as shown in the timetable, the Programme Board will inform the Examination Board of the decision to make the change at the next examination meeting;
7. Changes to the assessment schedule may not put students at an unreasonable disadvantage. The Examination Board may take special measures in individual cases.

#### Article 4.5 Oral Examinations

1. Oral examinations are to be administered in public, unless the Examination Board decides otherwise due to extraordinary circumstances;
  - a. If the student or the examiner actually wishes a third party to be present when administering the oral examination, then a request to this end must be submitted to the Board of Examiners at least fifteen working days prior to the oral examination. The student and the examiner are notified of the Programme Board's decision no later than 5 working days in advance. The Programme Board must inform the Examination Board of the decision at the next examination meeting. Public graduation symposia, public presentations and group tests are excluded from this provision;
  - b. If the Examination Board has decided that members of the Examination Board or an observer on behalf of the Examination Board is to be present during the administration of an oral examination, then the Examination Board is to make this known to the examiner and the student at least two working days prior to the oral examination.

#### Article 4.6 Assessment deadline, interim examination and test date

1. The examiner is to inform the student of the result of an oral examination within one working day;
2. The provisions of paragraph 1 do not apply if the oral examination is part of a series of oral examinations of the same study unit which are administered on more than one working day. In that case, the examiner is to determine the result within one working day following the conclusion of the series of oral examinations;
3. The deadline for determining and disclosing the results of a written test (or other kind of assessment) is to be included in the assessment schedule of the study unit;
4. The examination result of a study unit, determined in accordance with Article 4.1.8, is to be disclosed to the student within ten working days after the conclusion of the teaching period during which the study unit is offered. If the student fails an interim exam and the module examiner has determined that the student meets the conditions for participation in the repair option (in accordance with Article 4.4.5 (f), then this decision is to be made known the student within ten working days after the conclusion of the teaching period;
5. This interim exam date is the date on which the test is taken with which the student definitively passes the interim exam;
6. The test date is the date on which a written or oral test is taken;
7. If a test assessment is dependent on completing one or more assignments or writing a paper or thesis, then the test date will be the deadline of submission of the final component;
8. If a second test is planned shortly after the first, the results of the first test will be published at least five working days prior to the second test to give the student time to prepare;

9. Should the examiner not be able to meet the deadline as stated in Article 4.6, paragraphs 1, 2, 4 and 8 due to exceptional circumstances, then he is to notify the Programme Board and the Examination Board, providing reasons for the delay. The Programme Board is to inform the students involved of the delay immediately, and of the term within which the results will 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 exam at the request of the Programme Board.

#### Article 4.7 Period of validity

1. The results of an exam that has been passed remain valid indefinitely. The period of validity of an interim examination that was passed may only be limited if the tested knowledge or understanding is demonstrably outdated or the tested skills are demonstrably outdated;
2. The period of validity of the result of the test or tests for a module component is set out in the programme-specific Appendix and in the assessment schedule of the module.

#### Article 4.8 Right of inspection and discussion

1. The student is entitled to inspect and discuss his test together with the examiner, and the examiner is to explain the assessment;
2. If the examiner holds a group discussion of the assessment, the student must use that opportunity as his right to discussion as referred to in paragraph 1. If the student cannot attend the group discussion or if the student is not given the opportunity at the group discussion to discuss the reasons for the examiner's assessment of his test with the examiner, the student may submit a request for individual discussion with the examiner within five working days after the group discussion. The individual discussion must take place no later than three working days prior to the next test opportunity;
3. If there is no collective discussion of the test, then a student may submit a request to the examiner for an individual discussion within ten days after publication of the results. The individual discussion must take place no later than three working days prior to the next test opportunity;
4. Individual and group discussions must take place no later than five weeks after the publication of the test results, but at least three working days prior to the next test opportunity, in the presence of the examiner or a designated substitute;
5. The student has a right to inspect his assessed work for a period of two years following the assessment.

#### Article 4.9 Retention period of tests

1. The retention period for test assignments, keys and the assessments of written tests is two years;
2. De retention period for final Bachelor's projects is a minimum of seven years.

#### Article 4.9 Teaching evaluation

1. The Programme Board is responsible for monitoring the quality of the educational programme;
2. The Programme Board is responsible for evaluating the programme;
3. The programme-specific Appendix details how the tuition in the programme is evaluated.

## SECTION 5 - EXAMINATIONS

### Article 5.1 Examination Board

1. The Faculty Board appoints an Examination Board for each educational programme or group of programmes;
2. The Faculty Board convenes the Examination Board and appoints the members based on their expertise in the field of the relevant programme or group of programmes;
3. It is the responsibility of the Faculty Board to ensure that the Examination Board is independent and functions as an expert professional body;
4. Examination Boards determine the rules and guidelines for the examiners, interim examinations and examinations without further consultation (Higher Education and Research Act, Section 7.12b). These are set out in a separate document 'Examination Board Rules and Guidelines';
5. The statutory authority of the Examination Board applies to all study units comprising the student's degree programme.

### Article 5.2 Examination

1. In accordance with Section 7.10, subsection 2 of the Higher Education and Research Act, the Bachelor's examination is considered to be complete when the student has passed all study unit exams in the Bachelor's programme;
2. The Examination Board will issue a degree certificate as proof that the student has satisfied all the requirements of the Bachelor's exam once the institutional administration has confirmed that the procedural requirements for issuing the degree certificate have been met. The Examination Board will append a supplement to the degree certificate. The date indicated on the degree certificate (i.e. the date of the examination) is the day on which the student completed the final study unit of his degree programme (Section 7.11 of the Higher Education and Research Act);
3. A student may submit a written request to the Examination Board to postpone the examination, and thus to delay the awarding of the degree certificate. The student should indicate the duration of the postponement in his request. The requested postponement may not exceed 12 months;
4. If the student has requested postponement based on the provisions of paragraph 3, then the date of the examination will be the date on which the Examination Board decides that the student has passed the examination subsequent to the postponement;

### Article 5.3 Degree

1. Students who have successfully met all requirements for the Bachelor's examination will be awarded a Bachelor of Science (BSc) degree;
2. The degree conferred is stated on the degree certificate. The student's average mark (GPA) is mentioned on the degree supplement. An annex to the degree supplement indicates how the GPA is calculated.

### Article 5.3 Degree certificate

1. The Examination Board will award a degree certificate as evidence that the student has met all of the requirements of the Bachelor's examination. The degree certificate will be signed by the Chair of the Examination Board. If the Chair is absent, one of the members of the Examination Board may also sign the degree certificate;
2. The following information is to be mentioned on the certificate (in accordance with Section 7.11 of the Higher Education and Research Act):

- a. the student's name and date of birth;
  - b. the name of the institution and the degree programme as stated in the register as referred to in Section 6.3 of the Higher Education and Research Act;
  - c. the date on which the examination was completed;
  - d. the components<sup>8</sup> of the Bachelor's examination;
  - e. If the student has successfully completed an honours programme while on the Bachelor's programme, then this fact will be stated on the degree supplement as an extracurricular programme;
  - f. the degree conferred (in accordance with Section 7.10 (a) of the Higher Education and Research Act);
  - g. where appropriate, the specific qualifications associated with the degree (with due consideration for Section 7.6, subsection 1 of the Higher Education and Research Act);
  - h. the date on which the programme was last accredited or the date on which the programme passed the new programme assessment as referred to in Article 5a.11, paragraph 2;
3. An International Diploma Supplement is to be appended to the degree certificate (Section 7.11, subsection 4 of the Higher Education and Research Act). This supplement is intended to provide insight into the nature and content of the degree programme to promote the international recognition of the programme, among other aspects. The supplement is to include the following minimum information:
- a. the name of the programme and the name of the university;
  - b. that the programme was offered at an institution for academic education;
  - c. a description of the programme content; an indication of any specialization and/or minor, if applicable;
  - d. the study load of the programme;
  - e. the modules, the module components and their assessment;
  - f. interim exams passed by the student that are not part of the final examination;
4. If the Examination Board<sup>9</sup> has awarded a specific distinction (e.g. cum laude) to the student, then this is to be mentioned on the degree certificate;
5. Students who have successfully completed more than one exam but cannot be awarded a degree certificate as referred to in paragraph 1, will receive, at their own request, a statement prepared by the Examination Board which in any case will state the results of the exams the student has passed (Section 7.11, subsection 5 of the Higher Education and Research Act).

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<sup>8</sup>Components' in the Act means the study units of which the Bachelor's examination consists. At the University of Twente these are almost always the modules of which Bachelor's programme consists.

<sup>9</sup> There has long been discussion about the question if the Programme Board or the Examination Board should award the designation 'with distinction'. Both situations exist and minimum conditions / guidelines have been drawn up either in the Examination Board's rules or in the TER itself. a. Many of the faculties consent with the current text. b. A degree programme / faculty may modify the text if they wish. c. An alternative phrasing might be 'If a specific distinction has been awarded to the student, etc.'.



## **SECTION 6 – STUDENT GUIDANCE AND BINDING RECOMMENDATION**

### **Article 6.1 Study progress overview**

1. If needed, the student can request a certified study progress report from the Student Services desk.

### **Article 6.2 Student guidance**

1. The Faculty Board is responsible for student guidance, including informing students of opportunities for academic endeavour within the programme and via extracurricular avenues;
2. Each student is appointed a Study Adviser;
3. The Study Adviser supervises the student and advises him on study-related matters, as well as personal problems that may be affecting the student's studies;
4. If a student wishes to make use of his right to specific supervision or special facilities, they must contact the Study Adviser. The Study Adviser records the agreements made with the student;
5. The following applies to the entitlement to special facilities:
  - a. demonstrable circumstances beyond the student's control or extenuating personal circumstances;
  - b. if necessary and where possible, dispensation from participation in exams or tests and/or the availability of special facilities for exams and tests. Such dispensation and additional opportunities for tests may only be granted by the Examination Board;
6. An introductory interview will be held with each student before 1 November of the first year of enrolment in the programme;
7. Each student will receive a preliminary student progress evaluation by week 52 at the latest of his first year of enrolment in the programme. This also applies to students in their second year of enrolment in the degree programme whose student progress evaluation has been postponed. This preliminary student progress evaluation is not binding;
8. Each student will receive a second student progress evaluation on the continuation of studies by week 10 at the latest of their first year of enrolment in the programme. This also applies to students in their second year of enrolment in the degree programme whose student progress evaluation has been postponed. This preliminary student progress evaluation is not binding;
9. Students who receive a negative preliminary progress evaluation will be invited for an interview with the Study Advisor to discuss their study methods and review their choice of specialization.

### **Article 6.3 Binding recommendation**

1. Each student receives a written student progress evaluation at the end of the first year of enrolment in the programme about continuing his studies within the programme, notwithstanding Article 6.4. This progress evaluation is based on the student's results. The student may be allowed to continue on the programme, or may be required to leave the programme, with due regard to Articles 6.4 and 6.5;
2. The institutional administration mandates the Programme Board to issue student progress evaluations, as referred to in paragraph 1;
3. The student progress evaluation includes the results of the module components that remain valid the following academic year:
  - a. Only the credits from modules and module components in the first year of the programme count toward the threshold for the student progress evaluation;

- b. The exemptions for components of the first year awarded to the student count towards determining the number of credits;
  - c. The Programme Board may set down subject-specific requirements which must be met. These requirements are specified in the programme-specific Appendix<sup>10</sup>;
4. The student progress evaluation as referred to in paragraph 1 may include a rejection, if the student in the opinion of the Programme Board is not deemed suitable for the degree programme because the student has passed fewer than three modules in which:
  - a. the student has passed in total less than 75% of the study load of the first year, or;
  - b. the student has passed 75% or more of the study load of the first year but does not meet the programme-specific requirements (as referred to in paragraph 3 (c) of this Article). A student progress evaluation that involves expulsion is referred to as a binding student progress evaluation (BSA);
5. When considering a BSA involving expulsion, the Programme Board will take the student's personal circumstances into account at the student's request. The Programme Board will only take personal circumstances into account that have been reported to the Study Advisor as soon as can reasonably be expected following their onset;
  - a. Personal circumstances include illness, physical, sensory or other functional disability or pregnancy of the student involved, extenuating family circumstances, participation in top-level sports or arts and membership of the University Council, Faculty Council, Programme Committee or a Category 3 or 4 board in accordance with the FOBOS Regulations;
  - b. In consultation with the academic adviser, the personal circumstances are to be submitted to the Personal Circumstances Committee (CPO) and accompanied by supporting documentation;
  - c. The CPO will assess the validity and severity of the personal circumstances. The CPO will report its findings to the Programme Board and the relevant Study Adviser;
  - d. The Programme Board will take the CPO's findings into account when assessing the student's request;
6. Before issuing a BSA, the Programme Board must first issue a warning to the student giving him a reasonable term in which to improve the course results, to the Programme Board's satisfaction. In addition, students have the right to a hearing with the Programme Board prior to receiving a BSA (Higher Education and Research Act Section 7.8b, subsection 4);
7. The Programme Board's decision regarding the BSA will make mention of the applicable appeals procedure. Expulsion following a BSA may be appealed within six weeks by lodging an appeal with the Examination Appeals Board;
8. If a student receives a BSA, he/she may not enrol in the same degree programme for a period of three consecutive academic years;

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<sup>10</sup> Subject-specific requirements may not state that all module components of a certain type must be completed. 'The student must pass all mathematics module components from the B1 programme' is not permitted, whereas 'The student must pass three of the four mathematics components from the B1 programme' is permitted.

9. If a student re-enrols in the relevant Bachelor's programme after the period referred to in paragraph 8, this enrolment is designated as a first-year enrolment and the relevant provisions of this section apply in full.

#### Article 6.4 Discontinuation of the programme

1. The programme is considered to be discontinued if the student stops taking courses or any form of tests for the programme, and where the student:
  - a. submits a request with the University of Twente to terminate the enrolment, or;
  - b. de-enrols for the programme at the University of Twente, with the student enrolling in another programme at the University of Twente and thus switching to another programme at the University of Twente, or;
  - c. continues his studies at another institute of higher education with a proof of tuition fees paid;
2. If in his first year of enrolment for the degree programme a student submits a request through Studielink by 31 January to terminate enrolment and he is de-enrolled before or on 1 February and he does not re-enrol for the same programme in that same academic year, a student progress evaluation as referred to in paragraph 1 of Article 6.3 will not be issued. If this student does re-enrol in the relevant Bachelor's programme, this enrolment is designated as his first-year enrolment;
3. Students who are de-enrolled after 1 February for the degree programme at the University of Twente, will receive a student progress evaluation as referred to in Article 6.3 paragraph 1 from the programme they discontinued.

#### Article 6.5 Postponement of student progress evaluation

1. The student progress evaluation as referred to in Article 6.3 paragraph 1 may be postponed if:
  - a. the student has enrolled in the degree programme on or after 1 October of the relevant academic year and on 31 August at the latest has not met the norm set in Article 6.3, paragraph 3, or;
  - b. if personal circumstances preclude an assessment of a student's academic capacities at the end of the first year of enrolment in the degree programme, or;
  - c. the student switches from one degree programme at the University of Twente to another on or after 1 October of the first year, whereby the student de-enrols for one programme (discontinuation in the sense of Article 6.4, paragraph 1 under b) and enrolls in another programme;
2. If this student, whose progress evaluation as referred to in Article 6.3 (1) has been postponed based on that article, re-enrols in a subsequent academic year in the relevant programme, then a student progress evaluation will be issued at the end of that subsequent academic year. The same norm as set out in Article 6.3 (3) applies to this progress evaluation;
  - a. The student whose progress evaluation as referred to in Article 6.3 (1) has been postponed based on Article 6.5 (1)(a), will be notified in writing within 6 weeks of the date of enrolment before which date the programme will issue the final progress evaluation;
  - b. The student whose progress evaluation as referred to in Article 6.3 (1) has been postponed based on Article 6.5 (1)(b), will be notified in writing within 6 weeks of the

- date of enrolment before which date the programme will issue the final progress evaluation;
- c. For students whose progress evaluation as referred to in Article 6.3 (1) has been postponed based on Article 6.5 (1)(c), the end of the second year of enrolment in the relevant programme applies as the new deadline for the final student progress evaluation. The student progress evaluation is issued by the degree programme in which the student is newly enrolled;
3. If a student transfers to another UT degree programme prior to 1 October, then the norm will not be adjusted as referred to in Article 6.3, paragraph 3 and the evaluation will not be postponed based on transfer.

## **SECTION 7 – STUDYING WITH A FUNCTIONAL IMPAIRMENT**

### Article 7.1 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 Faculty Board, 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 Board 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 Adviser 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 Board reject the request in full or in part, the Faculty Board 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.

## **SECTION 8 – AMENDMENTS, TRANSITIONAL ARRANGEMENTS, APPEALS AND OBJECTIONS**

### Article A8.1 Conflicts with the regulations

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

### Article A8.2 Administrative errors

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

### Article A8.3 Amendments to the regulations

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

### Article A8.4 Transitional arrangements

1. In the case of amendments to the Teaching and Examination Regulations, the Faculty Board may decide to put a transitional arrangement in place.
2. Any such transitional arrangement will be published on the degree programme's website.
3. General principles for the transitional arrangement in the case of changes to the curriculum:
  - a. Changes to the curriculum are to be announced prior to the academic year in which the changes take effect;
  - b. No guarantee can be made that all programme study units that were part of the curriculum when a student enrolled in a programme will continue to be part of the curriculum. The final Bachelor's exam is to be based on the curriculum most recently adopted by the Faculty Board;
4. The transitional arrangement will always include:
  - a. the study units that are equivalent to study units or components of study units from the current curriculum as indicated in the programme-specific Appendix;
  - b. an indication that if a teaching unit that does not involve a practical is dropped from a programme, then students are to have at least two opportunities in the following year to take a written or oral exam or to undergo another form of assessment;
  - c. an indication that if a study unit with practical exercises is dropped from the programme and there is no opportunity in the subsequent academic year to complete the practical exercise, then at least one study unit will be designated that may be completed as a substitute for the study unit that has been dropped;
  - d. the period of validity of the transitional arrangement;

5. The transitional arrangement must be approved by the Examination Board with regard to the provisions of paragraphs 4a and 4c;
6. In exceptional cases and to the student's benefit, the Examination Board may deviate from the prescribed number of opportunities to sit exams related to study units that have been dropped from the curriculum.

#### Article 8.5 Assessment of the Teaching and Examination Regulations

1. The Faculty Board is responsible for the regular assessment of the Teaching and Examination Regulations and is to take into account the time involved for the student for the purposes of monitoring and adjusting the study load, if necessary;
2. Based on Section 9.18 of the Higher Education and Research Act, the Programme Committee has a partial right of approval of and a partial right to be consulted on the Teaching and Examination Regulations;
3. The Programme Committee is responsible for the annual assessment of the manner in which the Teaching and Examination Regulations are implemented.

#### Article 8.6 Appeal and objections

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

#### Article 8.7 Hardship clause

The Examination Board or the Programme Board may allow derogation from the provisions of these Regulations in the event of demonstrably compelling unreasonableness or unfairness. This depends on which body (Examination Board or Programme Board) is authorized or has the duty according to this regulation to take a decision on or make an exception to a provision in this regulation.

#### Article 8.8 Notification

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

#### Article 8.9 Entry into force

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

Adopted by the faculty board of the Faculty of Electrical Engineering, Mathematics & Computer Science, having regard to Section 9.5, 9.15, first subsection under a, Section 7.13, first and second subsection, Sections 9.38, under b, and 9.18, first subsection under a, and Section 7.59 of the Higher Education and Research Act, in due consideration of the recommendations of the Programme Committee, and following approval or advice from the Faculty Council.

Enschede, August 31, 2019

## SECTION B: PROGRAMME-SPECIFIC SECTION

# BACHELOR CREATIVE TECHNOLOGY (B-CREA)

### 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 university section, includes provisions that may apply for all EEMCS Bachelor's degree programmes. Section B contains the provisions that are specific to the particular degree programme, in this case the Bachelor's programme in Creative Technology.

In Paragraph 1 of this annex the Creative Technology degree programme has been described in accordance with Article 7.13 of the Higher Education and Research Act, as referred to in the Guideline for Teaching and Examination Regulations for Bachelor's programmes, Article 3.2.3.

In Paragraph 2 of this annex the other Creative Technology specific characteristics have been described.

This programme specific annex is applicable to all students enrolled in the Bachelor's programme Creative Technology. The transitional arrangements for students who were already enrolled for the Bachelor's programme Creative before September 1, 2013 and had education in the preTOM situation (the Twente Education Model (Dutch: Twents Onderwijs Model or TOM) have expired. The remaining, unfinished courses in the curriculum of those students will, from the academic year 2018 – 2019 onwards, be transferred to the module-based study units in the programme as outlined in Article 1.1.6 of this annex.

The Guideline for Teaching and Examination Regulations for Bachelor's programmes together with this annex form the applicable Teaching and Examination Regulations for the Bachelor programme Creative Technology<sup>11</sup>.

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<sup>11</sup> Guideline for Teaching and Examination Regulations for Bachelor's programmes, Article 1.1.4

## PARAGRAPH 1 – THE PROGRAMME SPECIFIC ISSUES (ARTICLES 3.1 AND 3.2 OF SECTION A)<sup>12</sup>

### Article 1.1 Programme Contents and examinations (a)

1. Students pass the bachelor's examination by completing the study units of tables 1 through 4 of this section.
2. Students must choose at the end of their first year between two options for module 5 in their second year: Smart Technology (module 5A) or Interactive Media (module 5B) as indicated in table 2.
3. The first semester of the programme's third year is in principle scheduled for a 30 EC free-space programme a.k.a. the minor programme. Students must choose their *minor* programme at the end of the second year. Students can take:
  - (dedicated) pre-Master modules or courses to prepare for further study in a Master's programme,
  - one or more High Tech, Human Touch (HTHT) modules or one of the other following general minor options: The Educative minor ("leren lesgeven" in Dutch only) or the Crossing Borders minor,
  - one semester of courses at another (foreign) university,
  - one or more "deepening" modules, one of those can be the alternative module of their first module in the second year,
  - one or more "broadening" modules (Join-in modules), first or second year modules which belong to other UT Bachelor's programmes,<sup>13</sup>
  - an internship,
  - and possibly more, with due observation of the provisions of article 1.9 of this annex.
4. The student's choice of modules in their minor space (see article 1.1.3 above) must meet the requirements of article 1.9 of this annex.
5. To pass their degree students complete a Graduation Project (GP).
  - a. Students complete their Graduation Project in two parts. The first part is contained in the "Real World Perspective" module (module 11), the second part in the "We Create Impact" module (module 12), as indicated in table 4. The combined study load of the two parts of the Graduation Project is 17 EC.
  - b. The Graduation Project (GP) consists of:
    1. a research project in which the student is required to develop a working example of a product or a service, based on a thorough literature review and

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<sup>12</sup> The regulations are: the teaching and examination regulations for Creative Technology. The letters (a-e, i, l, s, t, v) in the article titles of this paragraph refer to the corresponding items in WHW 7.13.2 and as mentioned in article 3.2.3 of the Guideline for Teaching and Examination Regulations for Bachelor's programmes.

<sup>13</sup> Information about the offer of deepening or broadening modules can be found at: <https://www.utwente.nl/en/education/electives/minor/offer/regular-minors/>



- the state of the art in the domain. The working prototype is to be evaluated with users; the proposal for this research project needs to be approved by the GP coordinator,
2. a thesis, with appendices where necessary, in which the student renders account of the Graduation Project,
  3. two public presentations and defence of the student's graduation work
- c. The "Real World Perspective" module and the "We CreaTe Impact" module are taught each semester; the "Real World Perspective" module (module 11) in blocks 1A and 2A and the "We CreaTe Impact" module (module 12) in blocks 1B and 2B. Students must successfully complete the "Real World Perspective" module before starting the "We Create Impact" module.
6. Tables 1 through 4 describe the content of all modules within the curriculum
- a. There are no module parts within the modules mentioned in tables 1, 2 and 4 allowed for separate assessment.
  - b. These module descriptions are based on the data of the previous academic year. These descriptions reflect the curriculum of the current academic year to the best of the Programme's Board knowledge but are not binding. They may be subject to minor changes based on e.g. the evaluation results of modules in the fourth quartile which still takes place during the composition of these teaching and examination regulations.
  - c. These module descriptions provide information about intended learning objectives of the modules and module components, module components, the assessment plan. More specific information about weights of each module component and the number of EC per module component is provided on Canvas.
  - d. The Programme Board in close cooperation with the Programme Committee will guarantee the correct completion and publication of the module descriptions no later than 2 weeks prior to the start of a respective module in accordance with the requirements specified in Article 4.4.2 of the Guideline for Teaching and Examination Regulations for Bachelor's programmes.

Table 1: Study units of year 1 (Modules 1 – 4)

Module	Name	Course Code (Osiris)	Assessment Type <sup>14</sup>
1	We Create Identity <sup>15</sup>	201900151	ADOPRW
2	Smart Environments <sup>16</sup>	201900109	ADOPRW
3	Living and Working Tomorrow <sup>17</sup>	201700306	ADOPRW
4	Art, Impact and Technology <sup>18</sup>	201700341	ADOPRW

Table 2: Study units of year 2 (Modules 5 – 8)<sup>19</sup>

Module	Name	Course Code (Osiris)	Assessment Type <sup>20</sup>
5A <sup>21</sup>	Smart Technology <sup>22</sup>	201800167	ADOPRW
5B <sup>21</sup>	Interactive Media <sup>23</sup>	201900127	ADOPRW
6	Intelligent Interaction Design <sup>24</sup>	201700131	ADOPRW
7	Innovation and Entrepreneurship <sup>25</sup>	201600233	ADOPRW

<sup>14</sup> Assessment types are explained in article 1.8.1 of this annex.

<sup>15</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201700132&collegejaar=2018&taal=en>

<sup>16</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201800199&collegejaar=2018&taal=en>

<sup>17</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201700306&collegejaar=2018&taal=en>

<sup>18</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201700341&collegejaar=2018&taal=en>

<sup>19</sup> The regulation regarding admission to study units in the table 2 is in Art. 1.9.2 of this annex.

<sup>20</sup> Assessment types are explained in article 1.8.1 of this annex.

<sup>21</sup> Students choose either module 5A (Smart Technology) or module 5B (New Media) as their module 5. There is no specific prerequisite requirement regarding the choice between the New Media or the Smart Technology module.

<sup>22</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201899167&collegejaar=2018&taal=en>

<sup>23</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201700016&collegejaar=2018&taal=en>

The name of the New Media module has been changed to Interactive Media as of 2019/2020

<sup>24</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201700131&collegejaar=2018&taal=en>

<sup>25</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201600233&collegejaar=2018&taal=en>

8	Data: from the Source to the Senses (DSS) <sup>26</sup>	201600234	ADOPRW
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Table 3: Study units of semester 1 in year 3, the minor programme (Modules 9-10)<sup>27</sup>

Module	Name	Course Code (Osiris)	Assessment Type <sup>28</sup>
9	A module / (exchange) courses in first half of the minor programme	Unknown, check respective modules or courses*	Unknown, check respective modules or courses
10	A module / (exchange) courses in first half of the minor programme	Unknown, check respective modules or courses*	Unknown, check respective modules or courses

\* The module code will depend on the individual choice of the student. If the student chooses a module at the UT, then the respective code should be filled in here. If the student chooses separate courses (i.e. parts of modules such as in some premasters, loose courses at the UT such as in some premasters or courses outside the UT), then all those individual courses will have a unique code.

The range of modules available at the University of Twente for the minor programme can be found in Article 1.1.3; more information on modules for the minor programme is available at the university's Major-minor website<sup>29</sup>.

Table 4: Study units of semester 2 in year 3, (towards) the graduation project (Modules 11-12)<sup>30</sup>

Module	Name	Course Code (Osiris)	Assessment Type <sup>31</sup>
11 <sup>32</sup>	Real World Perspective <sup>33</sup>	201600364	ADOPRW
12 <sup>34</sup>	We create Impact <sup>35</sup>	201800410	DOPR

<sup>26</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201600234&collegejaar=2018&taal=en>

<sup>27</sup> The regulation regarding admission to study units in the table 3 is in Art. 1.9.3 of this annex.

<sup>28</sup> Assessment types are explained in article 1.8.1 of this annex.

<sup>29</sup> <http://www.utwente.nl/en/education/electives/minor/>

<sup>30</sup> The regulation regarding admission to study units in the table 4 is in Art. 1.9.4 of this annex.

<sup>31</sup> Assessment types are explained in article 1.8.1 of this annex.

<sup>32</sup> The "Real World Perspective" module (module 11) is taught in the first half of each semester (blocks 1A and 2A). Students cannot take the Real World Perspective module after the We Create Impact module. Students must take the Real World Perspective module and the We Create Impact module consecutively in the same semester.

<sup>33</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201600364&collegejaar=2018&taal=en>

<sup>34</sup> The "We Create Impact" module (module 12) is taught in the second half of each semester (blocks 1B and 2B). Students cannot take the Real World Perspective module after the We Create Impact module. Students must take the Real World Perspective module and the We Create Impact module consecutively in the same semester.

<sup>35</sup> Osiris:

<https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=201800410&collegejaar=2018&taal=en>

Article 1.2 Contents of examination specializations (b)

There are no graduation track specializations within the Creative Technology programme.

Article 1.3 Intended learning outcomes (c)

Graduates of this programme are societal problem-solvers, who

- can trace back (or help a client trace back) a possibly ill-posed initial question to the underlying challenge,
- can generate ideas and concepts,
- can identify opportunities for the exploitation of new technologies,
- can develop ideas and concepts into working prototypes, and
- can evaluate these prototypes.

To this end, they acquire skills and knowledge in five areas:

- (1) Self-managing design process,
- (2) Understanding and use of technology,
- (3) Designing for interaction, expression, impact and experience,
- (4) Societal, economic, and global competences, and
- (5) Academic and professional skills.

The intended learning outcomes in area (1) Self-managing design process, are:

1. Graduates understand autonomous design, and have the skills and knowledge to act as an autonomous designer, thus
  - a. they can identify and choose projects,
  - b. they can explain and justify ideas in context,
  - c. they have developed personality and a personal style.
2. Graduates understand and are skilled in creative thinking and creative acting, thus
  - a. they know and can apply creative thinking techniques,
  - b. they know and can apply divergent and convergent thinking,
  - c. they know and can apply tinkering.
3. Graduates understand and have the knowledge to employ multidisciplinary design methods, thus
  - a. they understand and can apply phasing in the systematic design process
  - b. they understand and can apply demand driven and explorative design,
  - c. they can design in a team, and invoke help of experts
  - d. they have the knowledge and skills to document and report,
  - e. they have the knowledge and skills to incorporate the user in the design process,
  - f. they have the knowledge and skills to evaluate design options and take design decisions

The intended learning outcomes in the area (2) Understanding and use of technology are:

4. Graduates understand and can use technology in the following domains:
  - a. programming, algorithms, frameworks & protocols
  - b. web technology, web services and data management,
  - c. dynamic behaviour of physical systems, (especially in the electrical domain)
  - d. physical computing, sensing, physical (user) interaction
  - e. (Internet) network technology and protocols
5. Graduates can rely on a basic knowledge of physics, mathematics and engineering in support of their understanding and use of technology.

The intended learning outcomes in the area (3) Designing for interaction, expression, impact and experience are:

6. The graduates understand and can use expressive technology, thus
  - a. they have knowledge and skills in expressive media, like still and moving images, sound and 3d-modelling,
  - b. they have knowledge and skills in storytelling, story worlds, and messaging to various (international) audiences.
7. The graduates
  - a. have knowledge of and can investigate human technology relationships and human design relationships,
  - b. are familiar with arts and culture,
  - c. are aware of intercultural differences,
  - d. are aware of human factors, and of social patterns and societal structures.

The intended learning outcomes in the area (4) Societal, economic, and global competences are:

8. The graduates have knowledge and skills to bring creative technology to the market, hence
  - a. they have the knowledge to perform a market analysis in international markets
  - b. they are familiar with attracting capital and financing,
  - c. they understand intellectual property rights
  - e. they can write a business plan.
9. Graduates are aware of the roles of designers in society, and the standards (ethically and legally) for professional behaviour.

The intended learning outcomes in the area (5) Academic and professional skills are:

10. Graduates can communicate with experts and non-experts about all aspects of their field, this communication covers:
  - a. presentation,
  - b. justification,
  - c. documentation,
  - d. scientific debate.

In this communication the graduate knows how to employ modern media.

11. Graduates are:
  - a. capable of logical reasoning,
  - b. inquisitive and capable of posing proper questions,
  - c. they have knowledge of research methods,
  - d. they can set up their own research,
  - e. they can critically evaluate results obtained (by themselves and others),
  - f. they can work in a diverse and international team,
  - g. they are capable of critical reflection and can adapt their behaviour on the basis of that reflection,
  - h. they are aware of gaps in their own knowledge and skills, and
  - i. they are prepared to learn and capable of learning.

Article 1.4 Practical work and practical exercises (d)

There are no special provisions for practical work and exercises.

Article 1.5 study load of the programme and its units €

The study load of the study units is in the tables of article 1.1 of this annex. The study load of the entire programme is 180 EC.

Article 1.6 The full- /part-time status (i)

The programme enrolls only students with a full-time status.

Article 1.7 Period of validity of results (K)

Test results within a module-based study unit are only valid in the academic year in which they were obtained. The Examination Board may decide upon an extension of this period in individual cases at the request of the student.

Article 1.8 type and organization of tests and assessment (L)

1. The way tests and assessments are organized can be found in the tables 1 through 4 of article 1.1 of this annex. The following abbreviations are used:

A (Assignments) students hand in (homework) assignments.

D (Deliverable) students demonstrate the results of an assignment (a working prototype, a result to be analysed and observed, not mere text)

E (Essay) students hand in one or more essays.

O (Oral) oral examination

P (Public defence) students give a presentation and (publicly) defend the results of an assignment

R (Report) written report

W (Written) students participate in a session for a written exam

These codes for assessment characterize exams. The examiner<sup>36</sup> will observe these characteristics but may add more detailed requirements for assessment.

2. The Programme Board will set and publish the assessment schedule for all study units in tables 1, 2 and 4 (Article 1.1 of this annex) in accordance with the Guideline for Teaching and Examination Regulations for Bachelor's programmes, article 4.4.4.
3. In the case of a minor (Article 1.1. table 3), the Teaching and Examination Regulations of the educational programme providing this particular minor shall apply. This will also be the case for any extracurricular courses or modules.
4. Notwithstanding the provisions of article 4.4 of the Guideline for Teaching and Examination Regulations for Bachelor's programmes and article 1.8.2 of this annex, the module examiner<sup>37</sup> may decide in individual cases to offer a student an examination which deviates from the published standard.

The module examiner's authority to deviate from the scheme for test and assessment applies only in cases where the student has fulfilled the following conditions. The student has:

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<sup>36</sup> Staff member responsible for a specific part of a module.

<sup>37</sup> The individual appointed by the Examination Board to determine the results of the study unit.

- a. previously participated in the same module (study unit) and passed a number of tests in that module with good results, without passing the exam for the entire module.
  - b. submitted a request for exemption from the standard scheme, which meets the requirements of the “alternative test and assessment procedure”, established by the Programme Board and published at the programme’s website.
5. Authority of the module examiner and the Examination Board regarding supplementary assessment (applicable only to study units of Article 1.1, tables 1, 2 and 4 of this annex)
  - a. The module examiner of each module can offer participants a *supplementary assessment* for the particular module,
  - b. Students can not apply for admission to such a supplementary assessment,
  - c. Admission to supplementary assessment can be granted only to students who failed a module, but who were close to success, and who have shown, despite their failure for this module, clear progress towards reaching the final qualifications of the programme,
  - d. The Examination Board gives directions to the module examiner regarding the admission of students to supplementary assessment.
6. Supplementary assessment (applicable only to study units of Article 1.1, tables 1, 2 and 4 of this annex)
  - a. Supplementary assessment for a module is conducted within a 10 weeks period after the moment the result of the module is set. This does not entail that candidates are entitled to have a full 10 weeks period between the original result and the supplementary assessment.
  - b. For students who are admitted to the supplementary assessment, the result of the module is suspended, until the result of the supplementary assessment is available (i.e. suspension lasts at most 10 weeks)
  - c. If the result of supplementary assessment is lower than the initial result, the result of the module remains the same as the initial result.
7. Final repair session (applicable only to study units of Article 1.1, tables 1 and 2 of this annex)
  - a. The Programme Board chooses a time slot in the summer holiday period (July and/or August) where a limited number of tests will be offered for repair of failed study units.
  - b. Admission to these final repair sessions is restricted, the Programme Board will invite students to participate; students cannot apply for participation in a final repair session.
  - c. The Programme Board will inform the Examination Board about the final repair sessions, its invited attendees and the obtained results by the attendees.
8. An extension to finalising the Graduation Project (GP) can be granted:
  - a. by the GP supervisor and the critical observer,



- b. for the maximum period of 2 weeks,
- c. if and only if at least 50% of the thesis has been reviewed by both the GP supervisor and critical observer, and the feedback has been incorporated,
- d. if the student has successfully presented his/her work at the final GP presentation.

#### Article 1.9 Conditions of admission to study units (S)

1. Students cannot be registered for participation in two different study units at the same time. The Examination Board can grant an exemption to this rule in individual cases, upon request by the student.
2. Participation in study units of the second year is not permitted during the first year of enrolment as a Creative Technology student. The requirements of the second year study units partly coincide with the conditions for a notice of admission (binding study advise).
3. To start a minor programme, the following conditions must be met:
  - a. Study units of the first and second years must have been completed with a total study load of at least 90 EC (i.e. completion of 6 study units (modules)).
  - b. (*Minor programme*) The student has completed the minor application procedure, as published on the dedicated Canvas page by the Programme Board.
  - b1. (*Minor programme at UT*) The student's choice of the minor programme is in agreement with the provisions of the matrix of options for join-in minors, in-depth minors, and High Tech, Human Touch (HTHT) minors, as established by the university and published on the university's website
  - b2. (*Minor programme partly outside the UT*) The study units in the *minor programme* are courses offered by an institution or programme which has an accreditation proving its university level<sup>38</sup>, or comparable. The Examination Board may rule otherwise.
  - b3. (*Minor programme partly outside UT*) The study units devoted to foreign culture and language among the courses in the *minor programme* have a total study load of at most 10 EC.
  - b4. (*Internship as part of Minor programme*) The study units devoted to an internship in the *minor programme* must not exceed 15 EC. In order to pursue an internship or practical work, the student needs to apply at the Traineeship Office of the EEMCS faculty.
  - b5. (*Multidisciplinary project participation as part of the minor programme*) The study units devoted to participation in a multidisciplinary project in the *minor programme* must not exceed 15 EC. Examples of such projects at the UT are: Green Team, Solar Challenge, and Aerobotic Tech Team Twente (A3T). In order to be eligible for a multidisciplinary project the student needs to apply at the programme board.

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<sup>38</sup> Although institutes for higher professional education are recognized as universities outside the Netherlands, they are \*not\* included in this Dutch use of "university level". For a minor programme at such an institute a student needs permission of the Examination Board.

4. The Examination Board delegates advice and approval for choices of courses in the minor programme (i.e. modules 9 and 10) to the programme coordinator.
5. The graduation semester consists of two modules, the “Real World Perspective” module (module 11) and the “We CreaTe Impact” module (module 12)
  - a. In accordance with article 3.2.2j of the Guideline for Teaching and Examination Regulations for Bachelor’s programmes, students must have completed all study units (modules) of tables 1 and 2 (i.e. modules 1 through 8) of the bachelor programme Creative Technology, before starting the “Real World Perspective” module,
  - b. To start the “We CreaTe Impact” module, students must have completed the “Real World Perspective” module in the previous block.

Article 1.10 mandatory participation in practical work and/or practical exercises to be admitted to the examination (T)

1. The tables in Article 1.1 of this annex show for which study units participation in practical work is mandatory in order to be admissible to the exam (if any).
2. Provisions (if any) regarding mandatory practical work are also to be found in Article 1.9 of this annex.

Article 1.11 Selection procedures for special tracks within the study programme (V)  
There are no special tracks within the study programme that require selection procedures.

## PARAGRAPH 2 – OTHER PROGRAMME SPECIFIC CHARACTERISTICS

### Article 1.12 Language

See also the Guideline for Teaching and Examination Regulations for Bachelor's programmes, article 3.3.

1. The language of the programme is English. This applies both to teaching and examination.
2. The Examination Board can grant permission to teach and conduct interim examination in another language. Permission can be granted only if it serves the quality of the assessment.
3. The dean of the faculty Electrical Engineering, Mathematics and Computer Science issues a regulation concerning the assessment of English language proficiency of staff members who teach courses in the programme, and of the support staff for the programme. All staff involved must meet the language requirements of the regulation. Courses to improve English proficiency of staff members are provided.

### Article 1.13 Student counselling

See also the Guideline for Teaching and Examination Regulations for Bachelor's programmes, article 6.2.

1. By Article 6.2.2 of that Guideline, each student has a study adviser, who, in accordance with the university directive for study advice and notices of exclusion, is the primary person to address for students in matters concerning their study.
2. The study adviser for Creative Technology has a task in mentoring; i.e. personal guidance oriented to personal problems and personal growth.

### Article 1.14 Professional Development

1. Every student of Creative Technology has a mentor. Mentors are university staff members who take care of academic guidance and professional growth of their mentees.

### Article 1.15 The designated Master's programme

1. The master's programme for Creative Technology graduates, in accordance with section 7.13, subsection 3 of the Act, is the Interaction Technology Programme of the University of Twente.
2. Admission to other Master's programmes may depend on the study units in the student's minor programme. The Admissions Board of the Master's programme defines the requirements an applicant must meet to be eligible for admission.

### Article 1.16 The administration of the results for tests and exams

1. When an exemption is granted for a test, this is registered in the student information system as a result for that test, with code VR (Dutch: VRijstelling). This VR result will count as a grade 6.0 when the weighted average of test results according to the test scheme of the module is calculated.
2. A student who is entitled to an exemption for a test, may decide to take the test anyway, in order to get a proper mark, instead of the VR and its associated 6.0.

3. A test may be marked by *Pass* or *Fail* only, instead of a score on the standard numeric scale. A *Fail* is registered by code NVD (Dutch: Niet VolDaan), a *Pass* is registered by code V (Dutch: VolDaan). No numeric values are associated with these codes for the purpose of determining averages.

#### Article 1.17 Pass / fail regulation

1. Students who meet the following requirements will pass the Bachelor's final degree audit for the Creative Technology programme:
  - a. The student has received an assessment for all study units (i.e. modules 1 through 8, modules 11 and 12, and the study units of the minor space) of the Bachelor's final degree audit,
  - b. The student's marks are 6 or higher for all study units;

In all other cases, the student will not pass the final degree audit.

#### Article 1.18 cum laude (with distinction)

1. A student may pass the Bachelor's final degree audit with distinction (cum laude). The following conditions must be met to obtain the award of distinction:
  - a. the average of the assessment marks, scored on modules of the bachelor's examination, is at least 8.0;
  - b. when determining the above average, the modules for which no marks have been awarded or for which exemptions were granted will be left out of consideration;
  - c. none of the modules of the examination programme has been awarded an unsatisfactory grade;
  - d. no more than one module has been awarded a 6;
  - e. exemptions have been granted for no more than one third of the total degree programme;
  - f. the assessment mark of the Graduation Project in the "We Create Impact" module is at least an 8.0.
  - g. the bachelor programme has been completed within a maximum of four years (performance requirement).
3. In exceptional cases and at the student's request, the Examination Board may award the distinction (cum laude) if the student has met all requirements with the exception of the performance requirement, due to extenuating circumstances. These circumstances may involve delays recognised and provided for by the institution.
4. It should be noted that the award of distinction is never awarded automatically. In exceptional cases such as fraud the Examination Board may decide not to grant cum laude.

Article 1.19 Regulations regarding BSA (Notice of exclusion)

1. Creative Technology uses the BSA module of the student information system (Osiris).
2. Recommendations regarding the continuation of studies are based on results that are registered for the study units of the first year (i.e. for module results and not for the results of (sub)tests within modules).
3. The Creative Technology programme imposes no additional requirements for a positive recommendation except the requirement that 45 EC must have been completed, in accordance with article 6.3.7. of the Guideline for Teaching and Examination Regulations for Bachelor's programmes.
4. Students will receive their formal recommendations digitally (i.e. not on paper), and with a digital signature. The recommendations are formulated in accordance with the provisions of these regulations.

Article 1.20 Regulations regarding confidentiality and non-disclosure

1. The thesis of the Graduation Project is a public document that is available at the public repository "University of Twente Theses"<sup>39</sup>.
2. The Programme Board may decide to suspend publication of the Graduation Project thesis for a limited period of time and to declare the information in the thesis to have a confidential status.
  - a. Confidentiality can be granted only if the thesis supervisor asks for confidentiality at the start of the Graduation Project.
  - b. Even under an agreement of confidentiality, the thesis is accessible for parties who have duties and responsibilities regarding the quality of education: The Programme Director, Board of Examiners and, when applicable, the Quality Assessment Committee for accreditation purposes.
  - c. Parties with access to a confidential thesis will respect confidentiality and sign a non-disclosure agreement if so required.
3. The student's Graduation Project is completed by a public presentation and defense.
  - a. There is no exception to the rule that the presentation and defense are public.
  - b. The contents of the presentation may be adapted to prevent confidential information becoming public.

Article 1.21 Evaluation and safeguarding of education

See also the Guideline for Teaching and Examination Regulations for Bachelor's programmes, article 4.10. To monitor and improve the quality of teaching, the Creative Technology BSc programme uses information about the students' learning experiences.

1. Each student participating in a module will receive an invitation to participate in the UT – Student Experience Questionnaire (UT-SEQ).
2. The Programme Board has installed an independent, student-run evaluation committee: The CreaTe Evaluation Committee (CREEC). The CREEC will organize at least two panel

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<sup>39</sup> <http://essay.utwente.nl> (last visited 24-5-2018)

- discussions per module. The minutes of each panel discussion will be published on a website, accessible to both UT employees and students.
- a. The first discussion will take place half-way the completion of the module (weeks 4 or 5).
  - b. The second discussion will take place within two weeks after the completion of the module.
  - c. At the request of the module coordinator, or the Programme Committee, or the Programme Board the CREEC can organise an additional panel discussion.
3. The Programme Board in consultation with the module coordinator will organize panel discussions between Programme Board, teachers and students.
  4. The following external sources are used:
    - a. The National Student Survey (Dutch: Nationale Studenten Enquete)<sup>40</sup>.
    - b. The International Student Barometer<sup>41</sup>.

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<sup>40</sup> <https://www.studiekeuze123.nl> (last visited 8-5-2019)

<sup>41</sup> <https://www.i-graduate.org/services/international-student-barometer/> (last visited 8-5-2019)