EDUCATION AND EXAMINATION REGULATIONS

BACHELOR OF SCIENCE CREATIVE TECHNOLOGY

A. UNIVERSITY PART
B. PROGRAMME-SPECIFIC PART

2023-2024 academic year

Introduction to the Education 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 Education and Examination Regulations (EER (Dutch: OER)).

In accordance with Section 7.13, Paragraph 1, of the WHW, the EER 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 EER 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 EER.

The model EER is subdivided into two sections (Section A and Section B), which together form the EER. 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: GENERAL SECTION

A1. General provisions

Article 1.1 Applicability of these regulations

1. This general section of the education and examination regulations applies to all students enrolled in the bachelor's programmes Applied Mathematics, Business Information Technology, Creative Technology, Electrical Engineering and Technical Computer Science.
2. Students attending courses that are not part of the student's core programme (see Article 1.2) are subject to the assessment rules laid down in the assessment schedule of the relevant study unit. The decision on special facilities in accordance with Article 5.2 may only be taken by the examination board of the programme for which the student is enrolled.
3. Each programme has its own programme-specific part.
4. For each programme, this general section and the programme-specific part together form the education and examination regulations for the bachelor's programme concerned.
5. The general section and the programme-specific part of the education and examination regulations are determined 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 (fraud). The rules and regulations of the examination board for the bachelor's programme in question include additional rules about academic misconduct (fraud), such as which measures the examination board may take if it establishes misconduct (fraud).
7. The rules and regulations of the examination board of the bachelor's programme in question include provisions about the rules of order during tests and rules in case of emergencies.
8. The following applies in respect of the language used in the education and examination regulations and the rules and regulations of the examination board:
   a) In case of uncertainty or discrepancy, the Dutch version of this general section is binding[1].
   b) English versions of the programme-specific part of the education and examination regulations and the examination board's rules and regulations should be available for English-taught bachelor's programmes.
   c) Where the programme-specific part of the EER and the rules and regulations of the examination board of the bachelor's programme concerned are available in both Dutch and English, each version must, for the sake of clarity, state which version is binding.
9. Requests for exemptions in respect of provisions laid down in the education and examination regulations should be submitted to the examination board or the programme director of the student's own bachelor's programme, as laid down in the relevant articles of these Regulations.

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[1] The Dutch version of Section A can be found here: https://www.utwente.nl/en/eemcs/education/rules-guidelines/eer-b/eer-b2022/eemcs-bachelor-oer-2022-nl.pdf

Article 1.2 Definitions
The terms used in these Regulations should be interpreted as follows:

Academic year: The period beginning on 1 September and ending on 31 August of the following year.

Assessment schedule: A schedule showing the method of assessment for a module.

(Binding) recommendation on continuation of studies (Bindend studieadvies, BSA): A recommendation on continuation of studies as referred to in Article 7.8b, paragraph 1 and 2 WHW involving expulsion from the programme in accordance with Article 7.8b, paragraph 3 WHW, issued by the programme director on behalf of the institutional administration.

Canvas: University of Twente's digital learning environment.

Core programme: The same study units from the curriculum that apply to all the students following a programme.

Credit: a unit of 28 study workload hours, in accordance with the European Credit Transfer System. A full-time academic year consists of 60 credits, equal to 1680 hours of study (Article 7.4 WHW).

Curriculum: The aggregate of required and elective study units constituting a degree programme as laid down in the programme-specific part.

Degree programme: Bachelor's degree programme as referred to in the programme-specific part to these education and examination regulations.

Examination: An evaluation, performed to conclude a study unit, of the student's knowledge, understanding and skills as well as an assessment of the outcomes of that evaluation (Article 7.10 WHW); an examination may consist of a number of tests.

Examination Board: The body that objectively and professionally assesses whether a student meets the conditions laid down in the education and examination regulations regarding the knowledge, understanding and skills required to obtain a degree (Article 7.12 WHW).

Examiner: The individual appointed by the examination board to administer examinations and tests and to determine the results, in accordance with Article 7.12 paragraph c WHW.

Exemption: The decision of the examination board that the student has knowledge and skills which are comparable in terms of content, scope and level with one or more study units or components of study units. An exemption is granted on the basis of acquired competencies, i.e. previously passed examinations in higher education or in view of knowledge and skills attained outside higher education.

Faculty Board: Head of the faculty (Article 9.12, paragraph 2 WHW).

Final examination: A degree programme is concluded with a final examination. If the study units in the degree programme have been completed successfully, then the final examination will be deemed to have been completed (Article 7.10 WHW).

Higher Education and Research Act (abbreviated to 'WHW'): The Higher Education and Research Act, Bulletin of Acts and Decrees 1992, 593, and its subsequent amendments.

Honours Programme: Institution-wide bachelor's Honours programme.

Institution: University of Twente (Universiteit Twente).

Institutional administration: The Executive Board of the University of Twente (Article 1.1 WHW).

Minor profile: Elective space conferring 30 credits that the student can also fill with offer outside the programme.

Module: A total of 15 credits of one or more study units, in which the student's programme-specific knowledge, skills and attitude are developed and assessed as far as possible in an integrated and/or coherent manner.

Study unit: A programme component as defined in Article 7.3, paragraph 2 and 3 WHW. Each study unit is concluded with an examination.

Osiris: System designated by the institutional administration for registration and for providing information on all relevant data related to the students and the degree programme, as referred to in the WHW.

Practical exercise: A practical exercise as referred to in Article 7.13, paragraph 2d WHW is a study unit or a study unit component emphasising an activity that the student engages in, as described in the programme-specific part.

Programme Committee (OLC): Committee referred to in Article 9.18 WHW.

Programme Director: The person appointed by the faculty board to administer the programme (Article 9.17 WHW).

Student: Anyone enrolled in a programme in accordance with Article 7.34 and 7.37 WHW.

Study advisor: 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 student, as well as fulfilling an advisory role.

Study workload: The time an average student needs to learn the course material. The study workload comprises project work, independent study, lectures and writing assignments, for example. The study workload is expressed in ECTS credits according to the European Credit Transfer System.

Teaching period: The period in which a study unit is offered. This period starts in the first week in which an educational activity takes place for the study unit concerned and ends in the final week in which an educational activity takes place and/or a test is administered for the study unit concerned. Resits are not part of the teaching period. This period may sometimes not be the same as a quarter (a quarter of an academic year).

Test: An evaluation of the student's knowledge, understanding and skills as well as an assessment of the outcomes of that evaluation. A test is part of an examination. If the examination for a study unit consists of a single test then the result of that test will count as the result of the examination.

UT: University of Twente.

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.

The definition of all other terms used in these Regulations is in accordance with the definition accorded by the main text of this document, the programme-specific section of the EER, the student charter or the WHW.

A2. Contents and structure of the programme

Article 2.1 Final attainment levels and structure of the programme
Explanatory note: Article 7.13 WHW

1. The qualities relating to the knowledge, understanding and skills that the student should have acquired upon completing the programme (aims and learning outcomes) are set out in the programme-specific appendix.
2. The programme consists of 180 credits.
   a) The programme consists of a core programme of 120 credits, a minor of 30 credits and a graduation phase totalling at least 15 credits.

      Exceptions are the Advanced Technology and Technical Medicine programmes, which have electives instead of minors, or have no minors, but do have a core programme of more than 120 credits.
   b) The core programme of the educational programme is specified in the programme-specific appendix.
   c) The core programme consists of modules.

   d) Before the start of a study unit, the student must meet the prior knowledge prerequisites for that study unit, as described in the Osiris Course Catalogue.
   e) Students generally complete their minor courses in the first semester of their third year of study.
   f) The programme for which the student is enrolled may set conditions for the number of credits required to be eligible for admission to the minor course. These conditions are specified in the relevant programme-specific appendix.
   g) Students are limited in their choice of minor by the provisions of paragraph d and f. The choice of minors available can be viewed on the minor website
   h) In principle, 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 must at a minimum have completed the core of the bachelor's programme to be admitted to the graduation phase.
   j) The examination board[2] is authorised in individual cases to deviate from paragraph d, f, h and i, if strict adherence to those provisions would result in an unacceptable delay in study progress. In consultation with the study adviser, the student may submit a proposal to the examination board for this.
3. The programme-specific appendix describes the degree programme in accordance with Article 7.13, paragraph 2, a to e, i, l, s, t and v WHW.

Article 2.2 The programme's language of tuition
1. The official language of tuition is the language in which education is given, in which teaching material is provided and in which tests and examinations are held. Bachelor's programmes taught in Dutch will generally use study materials in English or Dutch.

2. The choice of the official language for an educational programme or components of an educational programme lies with the programme director, subject to the right of

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[2] It is important that the student is still able to achieve the final attainment levels of the programme. In light of this consideration, this authorisation has been formally conferred to the examination board, as they are the ones to ensure that a student who achieves the final attainment levels is able to graduate.

consent of the programme committee. The educational programme's language of tuition is specified in the programme-specific appendix.

3. If programme components deviate from the language of tuition, then this is to take place in accordance with the Code of Conduct for Languages of the University of Twente and Article 7.2 WHW.

4. For bachelor's programmes taught in Dutch, components of study units may be taught and assessed in English, if:
   a) a lecturer or tutor in the unit of study is not a native speaker of Dutch, or
   b) students from the relevant bachelor's programme take the module together with students from an English-taught bachelor's programme, or
   c) the programme director considers it necessary in order to fulfil one of the attainment targets or objectives of the educational programme in question in the area of English language communication skills.

Article 2.3 Exemption

1. The examination board may grant an exemption to students at their request for one or more examinations or tests. To this end, the student should demonstrate having sufficient knowledge and skills in relation to the examination concerned or the test in question.

2. An exemption granted by the examination board will be registered in Osiris under the study unit or study units, or components thereof, by means of an EX (exemption).

3. Students cannot be compelled to take additional study units or components of study units in their curriculum instead of an exemption that has been granted.

4. Students may also be exempted from practical exercises if they can demonstrate that a required practical exercise will likely give rise to a personal moral dilemma. In such cases, the examination board will determine whether the component can be completed in another manner and in what way.

Article 2.4 Elective programme

The examination board decides on requests for permission to take an elective programme as referred to in Article 7.3 WHW. 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.

A3. Teaching and Assessment

Article 3.1 General

1. Each study unit concludes with an examination.
2. The examination consists of one or more tests.
3. A test or examination may take several forms, e.g. a written test, an assignment, an oral test, practical exercises or a combination of the aforementioned. Tests and examinations can be administered online.
4. The programme director publishes at least the following details of the study units in Osiris not less than four (4) weeks in advance: scope, learning objectives and content, language of tuition and assessment, prerequisites, required and recommended study materials, design of teaching methods and assessment.
5. The possibility of unconditional access to at least one resit[3] must be offered for each study unit in the same academic year. An exception may be made for practical exercises (such as practical classes and projects).

Article 3.2 Online assessment

1. If an examination or test is administered using *online surveillance*[4] or *online proctoring*[5], the examination board may set further rules and conditions for online (proctored) assessment.
2. Further information and detailed rules on online assessment can be found on the university's website.

Article 3.3 Results

1. Results of examinations, tests or components of tests must be announced to students. Osiris is used for the registration of grades for examinations and in some cases also for tests.
2. The student has the right to inspect model test questions, such as akin tests, past tests, or tutorial assignments that are representative of the test or examination, as well as their keys and the norm for assessment.
3. The time allotted to administering a test may not exceed three hours. Exceptions in this regard are listed in section 7.2.
    If the examiner wishes to use a form of assessment that requires more than three hours, the examiner must, with due regard for article 3.1.4, ask the examination board for approval to deviate from the above.
4. Test results are expressed in a grade from 1 to 10 with a single decimal, or as 'pass' / 'fail'.
5. The examination result of a study unit, as determined by the examiner, is expressed in half grades from 1.0 to 5.0 and from 6.0 to 10.0[6], with grades only being rounded in the final phase[7] of the assessment of a study unit and in accordance with the schedule below:

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[3] This means resits of all the tests within a study unit.
[4] Camera surveillance of the student or students during an <u>unrecorded</u> test, using for example Canvas, Teams, etc.
[5] Surveillance of the student or students using special *proctoring* software, such as Proctorio.
[6] In Osiris, a comma is used, based on the Dutch grading system (e.g. 7,0).
[7] Final phase: when all grades are known.

If figure before the decimal (n) ≠5		
Figure ≥n.00 and <n.25	⇨	n.0
Figure ≥n.75 and <n.75	⇨	n,5
Figure ≥n.25 and <(n+1).00	⇨	(n+1).0
If figure before the decimal =5:		
Figure ≥5.00 and <5.50	⇨	5.0
Figure ≥5.50 and <6.00	⇨	6.0

6. Examination results of 6.0 or higher are a pass.
7. Examination results, if a pass, obtained at foreign universities will be registered as a P (pass). Examination results obtained at Dutch universities will be adopted one-to-one, with due regard for the provisions in paragraph 5.
8. Credits may only be issued for a study unit if the study unit has been completed with a pass mark.
9. If more than one examination or test result has been recorded in Osiris for one and the same unit of study, the highest grade will apply.

Article 3.4 Modules
1. Each module has a module coordinator, appointed by the programme director.
2. If a module comprises a single study unit then the examiner of that study unit will also be the module examiner.

Article 3.5 Registration
1. Registration in Osiris is required prior to participating in a module or study unit[8].
2. Upon registering for the module or study unit, the student will automatically be registered for the assessments associated with the teaching period of the module/study unit[9].

Article 3.6 Description of modules and assessment schedule
1. The programme-specific part contains a description of each module.
2. The module description must include:
    a) the study units comprising the module and the number of related credits;
    b) if applicable[10], the number of tests and their relative weighting;
    c) the language of tuition and assessment (Dutch-language programmes only);
    d) the manner in which the examinations and/or tests are sat (oral, written or an alternative manner).
3. The assessment schedule of a module is drawn up by the examiner or examiners and is determined by the programme director. The examination board provides advice on the assessment schedule.
4. The assessment schedule must be published in Canvas at least two weeks before the start of the module.

5. The assessment schedule of a module must include:

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[8] The applicable registration deadlines are mentioned on the webpage www.utwente.nl/en/education/student-services/education/courses-and-modules/

[9] The applicable registration deadlines are mentioned on the webpage www.utwente.nl/en/education/student-services/education/courses-and-modules/

[10] As with integrated modules or larger study units.

a) how the learning objectives of the module or the study units of the module are assessed and when they are attained;

b) the period of validity of the result of the test or tests;

c) in which weeks examimations, tests and resits are held (the precise times and dates will be announced via my-timetable);

d) any required minimum grade per test; a minimum grade for a test may not be set higher than 5.5;

e) if applicable: information on resits (such as conditions, compensation options and grading periods).

6. The programme director may modify the assessment schedule during the module or study unit:

a) The assessment schedule may only be changed in consultation with the module coordinator and the examiner of the study unit.

b) The programme director will consult the examination board before any changes to the form or manner of administering an examination or one or more tests. If the change only involves moving tests to a timeslot other than as shown in the timetable, the programme director will inform the examination board of the decision as soon as possible.

c) Students are to be informed immediately of the change.

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 3.7 Oral examinations

1. If the student or the examiner wishes a third party to be present when administering an oral examination, then a request to this end must be submitted to the programme director at least fifteen working days prior to the oral examination. The student and the examiner will be notified of the programme director's decision not less than five working days in advance. The programme director must inform the examination board of the decision. Public graduation symposia, public presentations and group tests are excluded from this provision.

2. 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 one working day before the oral examination.

Article 3.8 Assessment deadline, examination and test date

1. The examiner is to inform the student of the result of an oral examination within one working day, unless, for the examiner, 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 and announce the result within one working day following the conclusion of the series of oral examinations.

2. The result of a test is to be disclosed to the student within ten working days after the test date, with due regard for paragraph 8 below.

3. The examination result of a study unit 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.

4. The examination date is the date on which the test is taken with which the student definitively passes the study unit.

5. The test date is the date on which a written or oral test is taken.
6. If a test assessment is (among other things) 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 (or the date of the last written or oral test).
7. If a test resit is planned shortly after the first test, the results of the first test will be published at least five working days before the resit to give the student time to prepare.
8. Should the examiner not be able to meet the deadline referred to in paragraphs 1, 2, 3, 4 and 7 due to exceptional circumstances, then the examiner is to notify the examination board, providing reasons for the delay. The student concerned is to be informed of the delay immediately, and a new deadline for publication of the results will be set and notified to them. If the examination board is of the opinion that the examiner has not met the obligations, it may appoint another examiner to ascertain the result of the exam and determine the grade.

Article 3.9 Period of validity
1. The results of an examination that has been passed remain valid indefinitely. The period of validity of an 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. Results of tests of a study unit that was failed expire after the academic year. The study unit must be repeated in its entirety in the next academic year. Any exceptions are listed in the assessment schedule.

Article 3.10 Right of inspection and discussion
1. Student are entitled to discuss and review their 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 to exercise the right to discussion referred to in paragraph 1. If a 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 the test with the examiner, the student may submit a request for individual discussion with the examiner no later than on the first working day following the working day of the group discussion. Students are informed about the group discussions and the aforementioned deadline. The individual discussion is to take place no later than three working days prior to the next test opportunity.
3. If there is no group 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 is to 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 substitute designated for that purpose.
5. Students are to be given the opportunity to inspect their assessed work for a period of two years following the assessment.

Article 3.11 Retention period for tests

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

Article 3.12 Teaching evaluation
1. The programme director is responsible for monitoring the quality of the educational programme.
2. The programme director is responsible for evaluating the programme.
3. The programme-specific part details how the tuition in the programme is evaluated.

A4. Examinations

Article 4.1 Examination Board
1. In line with Articles 7.12a and 7.12b WHW:
   a) the faculty board appoints an examination board for each educational programme or group of programmes;
   b) examination boards determine the rules and regulations for the examiners, examinations and final examinations without further consultation.

Article 4.2 Final examination and degree
Explanatory notes: Article 7.10, paragraph 2 and Article 7.11 WHW

1. The bachelor's final examination is considered to be complete when the student has passed all study unit exams in the bachelor's programme.
2. The date of the final examination is the date on which the student completes the final study unit of the degree programme.
3. A student may submit a written request, giving reasons, to the examination board to postpone the final examination, and thus to postpone the awarding of the diploma. The maximum duration of any postponement that can be granted is twelve months, in principle. In exceptional cases[11], the student may have valid reasons for requesting that the awarding of the diploma be postponed for more than twelve 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 final examination subsequent to the postponement.
5. Students who have successfully met all requirements for the bachelor's final examination will be awarded a Bachelor of Science (BSc) degree.
6. The degree conferred is stated on the diploma.

Article 4.3 Diploma
Explanatory note: Article 7.11 WHW

1. The examination board will award a diploma as proof that the student has satisfied all the requirements of the exam once the institutional administration has confirmed that the procedural requirements for awarding the diploma have been met. The date indicated on the diploma (i.e. the date of the final examination) is the date on which the student completed the final study unit of the degree programme.
2. The diploma 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 diploma.
3. The following information is to be stated on the diploma:
   a) the student's name and date of birth;
   b) the name of the institution and the degree programme as stated in the register referred to in Article 6.3 WHW;
   c) the date of the final examination;
   d) the study unit components of the final examination;
   e) the degree conferred (in accordance with Article 7.10a WHW);

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[11] Some examples (by way of illustration, not to exclude other situations): the student follows a double bachelor's programme, the student needs more time for a pre-Master's programme, an extensive extra-curricular activity requires more than twelve months.

     f)   where appropriate, the specific qualifications associated with the degree (with due consideration for Article 7.6, paragraph 1 WHW);

     g)   the date on which the programme was last accredited or the date on which the programme passed the new programme assessment (Article 5a.11 WHW).

4. An International Diploma Supplement is to be appended to the diploma. 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 diploma supplement is to include the following information at a minimum:

     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 specialisation and/or minor, if applicable;

     d)   the study workload of the programme;

     e)   the final examination components and results, based on the registration of grades in Osiris;

     f)   examinations passed by the student that are not part of the final examination;

     g)   if the student has successfully completed an honours programme while on the bachelor's programme, then this fact will be stated on the diploma supplement as an extracurricular programme;

     h)   the student's average grade, weighted by credits (Grade Point Average, GPA). The diploma supplement indicates how the average grade is calculated.

5. If the examination board has awarded a specific distinction (e.g. cum laude) to the student, then this is to be mentioned on the diploma.

6. Students who have successfully completed more than one examination but cannot be awarded a diploma as referred to in paragraph 1, will receive, at their own request, from the Student Services Desk a statement prepared by or on behalf of the examination board which in any case will state the results of the examinations the student in question has passed.

A5. Study guidance

Explanatory notes: Article 7.13 paragraph 2u and Article 7.59 WHW

Article 5.1 Student guidance

1. The faculty board is responsible for student guidance.
2. Student support and guidance includes 'decentralized' guidance, as provided within study programmes, and 'central' guidance, as provided by the Centre for Educational Support.
3. Student guidance includes guidance with questions or problems with regard to career orientation and career choices and guidance with problems that affect study progress. Students are offered personal and professional student (career) guidance for optimal study progress. Where possible, needs for specific guidance are met.
4. Each student is assigned a study adviser.
5. The study adviser supervises students and advises them on all aspects of the studies, also on personal circumstances that may be affecting the student's studies.
6. The opportunity for an introductory interview will be offered to each student before 1 November of the first year of enrolment in the programme.
7. A systematic method on how students are monitored and obstruction in study progress is signalled is documented by the programme (for example in a policy plan or an annual cycle).
8. Information about the guidance facilities of the study programme is in any case available on the website of the study programme.

Article 5.2 Special facilities

1. If students wish to exercise their right to specific supervision or special facilities, they should contact the study adviser. The study adviser will record the agreements made with the student in Osiris.
2. A student is entitled to special facilities in case of demonstrable circumstances beyond the student's control or extenuating personal circumstances. The facility may provide for dispensation from or an additional opportunity to sit examinations or tests to be granted and/or for specific facilities to be made available. Such dispensation and additional resits may only be granted by the examination board.

A6. (Binding) recommendation on continuation of studies
Explanatory note: Article 7.8b WHW

Article 6.1 Preliminary recommendation on continuation of studies
1. Students will receive a preliminary recommendation on continuation of studies by calendar week 52 at the latest of their first year of enrolment in the programme and a second recommendation on continuation of studies by calendar week 10 at the latest. These recommendations can be positive, negative or neutral and are not binding. Students with a postponed recommendation on continuation of studies receive a warning in their second year of enrolment in the degree programme when their study progress is jeopardized.
2. Students who receive a negative recommendation on continuation of studies will be invited for an interview with the study adviser to discuss their study methods and review their choice of specialisation. A negative preliminary recommendation on continuation of studies is considered as a warning (Article 6.2, paragraph 4).

Article 6.2 (Binding) recommendation on continuation of studies
1. Students receive a written recommendation on continuation of studies, at the latest by the end of the first year of enrolment in the programme, about continuing their studies. This recommendation 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 for Articles 6.3 and 6.4. The institutional administration mandates the programme director to issue recommendations on continuation of studies.
2. The recommendation on continuation of studies includes:
   a) the results of examinations and tests from the first year of the programme that remain valid the following academic year;
   b) the exemptions for examinations and tests in the first year that were granted to the student.

   The programme director may set programme-specific requirements which must be met. These requirements are specified in the programme-specific part. Programme-specific requirements may not state that all study units of a certain curricular course must be attained[12].
3. The programme director may decide that a recommendation on continuation of studies should involve expulsion. A recommendation on continuation of studies that involves expulsion is referred to as a binding recommendation on continuation of studies (bindend studieadvies, BSA). The programme director will take the student's personal circumstances of which the university is aware into consideration when making a decision. The recommendation on continuation of studies may only involve expulsion if the programme director considers the student as not suited to the educational programme, or the student's results do not meet the required standard, i.e. if:
   a) the student has obtained fewer than 45 credits of the first year, or
   b) the student has obtained 45 or more credits of the first year, but does not meet the programme-specific requirements (as referred to in paragraph 2 of this article). The decision notification relating to a binding recommendation on continuation of studies must inform the students of their right to file an objection and appeal via the Complaints Desk.

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[12] For example: 'The student must pass all mathematics study units from the B1 programme' is not permitted, whereas 'The student must pass three of the four mathematics study units from the B1 programme' is permitted

4. Before issuing a binding recommendation on continuation of studies, the programme director must first issue a warning to the student giving him/her a reasonable term in which to improve the course results, to the programme director's satisfaction (Article 6.1 paragraph 2), and the programme director will give the student the opportunity to be heard.

5. Students may file a request (supported by documentary evidence) for assessment of their personal circumstances to the Personal Circumstances Committee (CPO). This request is to be filed in consultation with the study adviser. The CPO will assess the validity, nature, severity and duration of the personal circumstances and will issue an advisory opinion on these matters. The CPO's advisory opinion, issued to the programme director and the study adviser concerned, will be taken into account in the programme director's decision-making referred to in paragraph 3.

6. 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.

7. Students who have received a binding recommendation on continuation of studies (BSA) may not enrol in the same degree programme for a period of three consecutive academic years. If a student re-enrols in the relevant bachelor's programme after this period, this enrolment is designated as a first-year enrolment and the relevant provisions of this section apply in full.

Article 6.3 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 to the University of Twente to terminate the enrolment, or
    b) submits a request to terminate the enrolment for one programme at the University of Twente and enrols in another programme at the University of Twente, thus switching to another programme at the University of Twente, or
    c) continues the studies at another institute of higher education with a proof of tuition fees paid (bewijs betaald collegegeld, BBC).

2. A recommendation on continuation of studies will not be issued if the request to terminate enrolment is received through Studielink by 31 January in the first year of enrolment for the degree programme and the student does not re-enrol for the same programme in that same academic year. If the student re-enrols in the same bachelor's programme in a following academic year, this enrolment is designated as the first-year enrolment.

3. Students who de-enrol after 1 February for a degree programme at the University of Twente will receive a recommendation on continuation of studies, as referred to in Article 6.2 paragraph 1, from the programme they discontinued.

Article 6.4 Postponement of recommendation on continuation of studies

1. The recommendation on continuation of studies as referred to in Article 6.2 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, or
    b) if personal circumstances preclude an assessment of the student's suitability at the end of the first year of enrolment in the degree programme.

In the event of postponement pursuant to the provisions under a), the recommendation on continuation of studies will be issued by the degree programme in which the student is newly enrolled.

In the event of postponement pursuant to the provisions under a), the recommendation on continuation of studies will be issued by the degree programme in which the student is newly enrolled.

2. If the student whose recommendation has been postponed re-enrols in a subsequent academic year in the same programme, the end of the second year of enrolment in the relevant programme at the latest will be the deadline for issuing the recommendation on continuation of studies. The student will in any event be notified in writing within six weeks of the date of enrolment before which date the programme will issue the final recommendation. The same norm as set out in Article 6.2 paragraph 3 applies to this recommendation.

3. If a student transfers to another UT degree programme prior to 1 October, then the recommendation on continuation of studies will not be postponed based on transfer and the norm will not therefore be adjusted as referred to in Article 6.2, paragraph 3.

A7. Studying with a functional impairment

Explanatory notes: Article 7.13 paragraph 2m WHW and Article 2 of the Equal Treatment of Disabled and Chronically Ill People Act (WGBH/CZ)

Article 7.1 Studying with a functional impairment

1. A functional impairment is defined as having an illness, condition, impairment or handicap that might impede or otherwise constitute a barrier to the student's academic progress.
2. Facilities are to be aimed at removing individual barriers in the teaching programme and/or when it comes to taking examinations and tests. These facilities may be related to access to infrastructure (buildings, classrooms and teaching facilities) and study materials, adjustments to the form of assessment, alternative learning pathways or a customised study plan.

Article 7.2 Request for facilities

1. The study adviser and the student concerned will discuss the most effective facilities that can be provided for the student.
2. Based on the discussion referred to in paragraph 1, the student is to submit a request for facilities. This request should be submitted to the study adviser, who has been mandated by the faculty board, preferably three months before the student is to participate in classes, exams and tests for which the facilities are required.
3. The request should be supported by documents that are needed to enable an assessment to be made.
4. The study adviser will decide on the admissibility of the request and will inform the student of the decision within twenty working days after receipt of the request, or sooner if the urgency of the request dictates.
    a) Should the request be granted, the period of validity will also be indicated.
    b) If the request is not granted, or only partly granted, the study adviser will inform the student of the justification for not granting the request as well as the possibilities for filing an objection and an appeal with the Complaints Desk.
    c) Students who are dyslexic, will be granted a maximum of 15 extra minutes for each hour that a test or exam is officially scheduled.
5. The study adviser shall inform the relevant parties in good time about the facilities that have been granted.
6. The applicant and the study adviser will evaluate the facilities before the end of the period for which they have been granted. During this evaluation, the parties discuss the effectiveness of the facilities provided and whether they should be continued. No evaluation takes place of facilities granted to students because of the functional impairment dyslexia.

A8. Amendments, transitional arrangements, appeals and objections

Article 8.1 Conflicts with the regulations
If other additional regulations and/or provisions pertaining to education and/or examinations conflict with these education and examination regulations, the provisions in these education and examination regulations will prevail.

Article 8.2 Administrative errors
If, following the publication of a result, a marks sheet, or a student's progress report a manifest 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 8.3 Amendments to the Regulations
1. Substantive amendments to these Regulations are enacted by the faculty board in a separate decision.
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 students 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 8.4 Transitional arrangements
1. In the case of amendment of these education and examination regulations, the faculty board will adopt a transitional arrangement, as necessary.
2. The transitional arrangement is to be published on the degree programme's website.
3. Changes to the curriculum are to be announced prior to the academic year in which the changes take effect. No guarantee can be made that all programme study units that were part of the curriculum when students enrolled in a programme will continue to be part of the curriculum. The final bachelor's examination 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, which have been dropped, that are equivalent to study units from the current curriculum as indicated in the programme-specific part;
    b) an indication that if a study unit that does not involve a practical is dropped from the curriculum, then students are to have at least two opportunities in the following academic 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 curriculum and there is no opportunity in the subsequent academic year to complete the practical exercises concerned, 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.

6. In exceptional cases and to the student's benefit, the examination board may deviate from the prescribed number of opportunities to sit exams and/or tests related to study units that have been dropped from the curriculum.

Article 8.5 Assessment of the education and examination regulations
1. The faculty board is responsible for the regular assessment of the education and examination regulations, with specific emphasis on the study workload.
2. Based on Article 9.18 WHW, the programme committee has a partial right of consent of and a partial right to be consulted on parts of the education and examination regulations.
3. The programme committee is responsible for the annual assessment of the manner in which the education and examination regulations are implemented.

Article 8.6 Appeal and objections
An appeal and objections must be submitted in writing to the University of Twente Complaints Desk within six weeks after notification of a decision to the student.

Article 8.7 Hardship clause
In cases of demonstrable unreasonableness and unfairness of a predominant nature, the examination board or the programme director may allow the provisions in these Regulations to be deviated from. This depends on which body is authorised or has the duty according to these Regulations to take a decision on or make an exception to a provision in these Regulations.

Article 8.8 Publication
The education and examination regulations and the examination board's rules and regulations are to be published on the degree programme's website.

Article 8.9 Entry into force
These Regulations enter into force on 1 September 2023 and replace the Regulations dated 1 September 2022.

Adopted on 26 May 2023 by the faculty board, having regard to Article 9.5, 9.15 paragraph 1a, 7.13 paragraph 1 and 2, 9.38b, 9.18 paragraph 1a and 7.59 WHW, and after approval by the faculty council.

SECTION B: PROGRAMME-SPECIFIC PART

BACHELOR CREATIVE TECHNOLOGY (B-CREA)

About this Part

The Education and Examination Regulations (EER) are subdivided into two parts (Part A and Part B), which together form the EER. Part A, which can be seen as the university part, includes provisions that may apply for all EEMCS Bachelor's degree programmes. Part B contains the provisions that are specific to the particular degree programme, in this case the Bachelor's programme in Creative Technology.

PART B – PROGRAMME-SPECIFIC PART CREATIVE TECHNOLOGY

B1. Programme content and structure

The foundation of the Creative Technology (CreaTe) programme lays on the domains of computer science, electrical engineering, design, and social sciences (in particular entrepreneurship and innovation studies). Next to the domain-specific knowledge, CreaTe students master academic and professional skills as well as global competence. The goal of the programme is to train T-Shaped engineers with a variety of engineering skills, who can solve (global) societal problems both individually and in diverse teams.
Since the academic year 2023-2024, CreaTe is taught at two locations: UT in Enschede and VU Vrije Universiteit Amsterdam. Students studying at the VU location are enrolled at the UT meaning that this EER is leading for them.

Art. 1.1 Intended Learning Outcomes (c)
Graduates of this programme are globally minded 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 in various (global) contexts,
- 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. dynamic behaviour of physical systems, (especially in the electrical domain)
c. physical computing, sensing, physical (user) interaction,
d. (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 and can communicate with people from other cultures,
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. Graduates have knowledge and skills to bring creative technology to the global 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 are capable of learning.

Art 1.3 CreaTe curriculum

Module code	Module name	SU code	Study unit (SU)	EC
Year 1				
202200130	**M1: Foundations of CreaTe[1]**	202200131	Introduction to CreaTe	8.5
		202200132	Mathematics	1.5
		202200133	Introduction to Computer Science and programming	4
		202200134	Professional Development	1
202000960	**M2: Smart Environments[2]**	202000961	Smart Environments Core	7
		202100241	Introduction to Engineering	4
			Interactive Visualisation	3
		202000963	Professional Development	1
202000965	**M3: Living and Working Tomorrow[3]**		Living & Working Tomorrow	7
			Technology & Society	1.5
		202000968	Introduction to Physical Systems	3
		202000969	Math and Modelling	2.5
		202000970	Professional Development	1
202000972	**M4: Art, Impact and Technology[4]**	202000973	Art && Technology	8
		202000975	Algorithms for Creative Technology	3
		202000976	Statistics	3
		202000977	Professional Development	1
Year 2				
202000979	**M5A: Smart Technology[5a*]**	202000980	Smart Technology Core	9.5
		202000981	Sensors	3
		202000982	Literature Research Project	2
		202000983	Professional Development	0.5
202000985	**M5B: Interactive Media[5b*]**		Interactive Media Project & Game Engine Technology	5
			Game Design	2
			3D Modelling & Animation	1.5
			Sound Engineering	2
		202000987	Mathematics for Interactive Media	2
		202000988	Literature Research Project	2
		202000989	Professional Development	0.5
202000991	**M6: Intelligent Interaction Design[6]**	202000992	Design and Research of User Experience	6.5
		202000993	Artificial Intelligence	5
		202000994	Statistical Techniques	3
		202000995	Professional Development	0.5
202000997	**M7: From ideas to society**	202000998	Responsible Entrepreneurship	7
		202000999	Acting Responsibly	3.5
		202001000	Empirical Research Methods	4
		202001001	Professional Development	0.5
202001003	**M8: Data: from the source to the senses[8]**	202001004	Hybrid Worlds Project	4.5
		202001005	Internet Technology	2.5
		202001006	Data Visualisation	2.5
		202001007	Data Driven Applications	2.5
		202001008	Either: ST: Biosignals and Medical Electronics	2.5
		202001009	OR: IM: Animated Storytelling	2.5
		202001010	Professional Development	0.5

Year 3				
xxxxxxxxx	Minor/exchange			15
xxxxxxxxx	Minor/exchange			15
2020011012	**M11: Real World Perspective[9]**	tba	Graduation Project I	7
		tba	Reflection	3
			Elective**	5
		202001015	EITHER Documentary Practice	
		202001016	OR Remote Care Nearby***	
		202001017	OR Design of Persuasive Health Technology	
		202001555	OR Storytelling through Oral Presentation	
		202001508	OR Study Trip Preparatory	2
		202001509	Study Trip Exploratory	3
202001018	**M12: We Create Impact[10]**	tba	Graduation Project part II	13
		tba	Reflection	2

Table 1 Curriculum Creative Technology. All CreaTe modules have the ADOPRW assessment types. Assessment types are explained in article 1.8.1 of this part.

* elective: students can choose between Smart Technology, Interactive Media
** one of the 5EC elective courses; the study trip courses must be taken together
*** Only available in the second semester

1 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000951&collegejaar=2021&taal=en

2 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000960&collegejaar=2021&taal=en

3 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000965&collegejaar=2021&taal=en

4 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000972&collegejaar=2021&taal=en

5a https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000979&collegejaar=2021&taal=en

5b https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000985&collegejaar=2021&taal=en

6 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000991&collegejaar=2021&taal=en

7 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202000997&collegejaar=2021&taal=en

8 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202001003&collegejaar=2021&taal=en

9 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=2020011012&collegejaar=2021&taal=en

10 https://osiris.utwente.nl/student/OnderwijsCatalogusSelect.do?selectie=cursus&cursus=202001018&collegejaar=2021&taal=en

Art. 1.2 Programme Content and examinations

1. Students pass the bachelor's examination by completing the study units of table 1 of this part.
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), Interactive Media (module 5B) as indicated in table 1.
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,[xiii]
   • an internship,
   • and possibly more, with due observation of the provisions of article 1.8 of this part.
4. The student's choice of modules in their minor space (see article 1.2.3 above) must meet the requirements of article 1.8 of this part.
5. To pass their degree students successfully 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 1. 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 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. one non-public (module 11) and one public presentation and defence (module 12) 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 at least the Graduation Project I (Thesis part I and Academic Writing) study unit in module 11 before starting the "We Create Impact" module.

6. Table 1 provides the content of all modules within the curriculum and links to the module information in Osiris.
   a. Modules 1-8 (core programme), 11 and 12 provide coherent education consisting of several study units that are related. These study units are assessed and graded separately. These modules itself are not graded.
   b. Even though the modules 1- 8, 11 and 12 have separately graded study units, these study units are related and ideally should be taken together in the first attempt.

[xiii]Information about the offer of deepening or broadening modules can be found at:
https://www.utwente.nl/en/education/electives/minor/offer/regular-minors/

c. The 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 director knowledge but are not binding. They may be subject to minor changes based on e.g., the evaluation results of modules and study units in the fourth quartile which still takes place during the composition of these education and examination regulations.

d. Osiris module information of modules 1- 8, 11 and 12 provide module descriptions, number of EC per study unit, intended learning objectives of the study units, and the assessment plan. More specific information about weights of each study unit part is provided on Canvas.

e. The programme director in close cooperation with the Programme Committee will guarantee the correct completion and publication of the module descriptions no later than four (4) weeks prior to the start of a respective module in accordance with the requirements specified in Article 3.1.4 of the Guideline for Education and Examination Regulations for Bachelor's programmes.

Art. 1.4 study load of the programme and its units
The study load of the study units is in the table 1 of article 1.3 of this section. The study load of the entire programme is 180 EC.

Art. 1.5 The full- /part-time status
The programme enrols only students with a full-time status.

Art. 1.6 Period of validity of results

1. Test results within a 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.

2. In case a student failed a module, results obtained in 2019-2020 (and before) for those parts of the module that in 2020-2021 have become study units will remain valid in the academic year 2022-2023. To remain valid, the grades obtained in 2019-2020 and before need to be at least a 5.5. Grades lower than 5.5 will not qualify as a pass. The newly obtained results will be registered under new module codes for the resiters. The old passing grades of the resiters will be transferred to the new module codes.

3. The Reflection components in Modules 11 and 12 became separate study units in 2021-2022, passing grades for these components obtained in 2020-2021 remain valid in 2022-2023. Academic writing in module 11 became part of the Graduation Project I study unit in 2022-2023. Passing grades obtained in 2020-2021 for Academic writing remain valid in 2022-2023.

4. Passing grades, i.e., 5.5, for the components of Module 2 that become separate study units (i.e., Smart Environment core and Introduction to Engineering in 2021-2022), of Module 5 Interactive Media (Interactive Media core split into separate study units in 2022-2023), and Module 1 (see appendix A for 2022-2023) will be transferred to the new modules' and study units' codes for the resiters.

5. A detailed overview of the curriculum of 2019-2020 and 2020-2021 for modules 11 and 12 and the module parts of which the results remain valid in 2022-2023 is provided in appendix B.

6. Transitional arrangements for 2022/23 new curriculum are provided in appendix A.

7. A study unit that was not passed in 2020-2021 (or before), must be repeated in its entirety.

Art. 1.6.1 Supplementary assignment

1. Notwithstanding the provisions of article 3.9 of the Guideline for Education and Examination Regulations for Bachelor's programmes and article 1.6.7 of Part B, the module examiner may decide in individual cases to offer a student an examination which deviates from the published standard.

2. The module examiner's authority to deviate from the scheme for test and assessment applies only in cases where the student has fulfilled one of the following conditions. The student has:
    a. previously participated in the same study unit and passed several tests in that study unit with passing results, without passing the exam for the entire study unit.

b. submitted a request for exemption from the standard scheme to the Examination Board, which meets the requirements of the "alternative test and assessment procedure", established by the Programme Director and published in Osiris and Canvas.

Art. 1.7 Type and organization of tests and assessment

1. The way tests and assessments are organized can be found in the table 1 of article 1.1 of this section. 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

2. The programme director will determine and publish the assessment schedule for all study units in table 1 (Article 1.1 of this section) in accordance with the Guideline for Education and Examination Regulations for Bachelor's programmes, article 3.6.3 and 3.6.4.

3. In the case of a minor (Article 1.1. table 1), the Education 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. Authority of the module examiner and the Examination Board regarding supplementary assessment (applicable only to study units of Year 1 & 2 of Article 1.1, table 1 of this section)

    a. The module examiner of each module can offer participants a *supplementary assessment* for a particular study unit in the 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 study unit, clear progress towards reaching the final qualifications of the programme.

5. Supplementary assessment (applicable to study units of Article 1.1, table 1 (excluding minor) of this section)

    a. Supplementary assessment for study units within a module is conducted within a 10 weeks period after the moment the results of the module study units are 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 study unit they failed 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 study unit remains the same as the initial result.

6. Final repair session (applicable only to study units of Year 1 & Year 2 of Article 1.1 table 1 of this section)

    a. The programme director 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 to the students invited by the programme director about two weeks prior to the final repair sessions; students cannot apply for participation in a final repair session.

    c. The programme director will inform the Examination Board about the final repair sessions, the invited attendees, and the obtained results by the attendees.

7. 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.

Art. 1.8 Conditions of admission to study units

1. Students who want to repair failed study units from previous years are allowed to register and participate in more study units than the study units belonging to one module at the same time. It is the responsibility of the student to judge whether the study load is doable within a given quartile. The programme will not adjust the schedule to accommodate the needs of different students regarding the study units outside the main module.

2. Due to the large amount of groupwork and study load, it is not allowed to participate simultaneously in two study units of different modules in the same quarter that have a major project as one of the parts. More specifically, it is not possible 1) to combine "Introduction to CreaTe" (M1) with either the "Smart Technology Core" (M5A) or "Interactive Media Project & Game Engine Technology" (M5B); 2) to combine "Smart Environments Core" (M2) with "Design and Research of User Experience" (M6); 3) to combine "Living & Working Tomorrow" (M3) with "Responsible Entrepreneurship" (M7) and 4) to combine "Art && Technology" (M4) with "Hybrid Worlds Project" (M8). 5) The same rule applies to the minor space.

3. Participation in study units of the second year is not permitted during the first year of enrolment as a Creative Technology student.

4. Students must obtain at least 105 ECs from the core CreaTe programme (i.e. modules 1-8) to participate in the study units of module 11 "Real world perspective" with an exception for the graduation phase (see Art. 1.8.7).

5. 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.

    b. (*Minor programme*) The student has completed the minor application procedure, as published on the dedicated Canvas page by the programme director.

    b1 (*Minor programme at UT*) The student's choice of the minor programme agrees 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[xiv], 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). To be eligible for a multidisciplinary project the student needs to apply at the programme coordinator.

[xiv] 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.

6. 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.

7. 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 2.1.2 of the Guideline for Education and Examination Regulations for bachelor's programmes about the core programme and prerequisites for study units, students must have completed the core programme of 120EC (i.e., full modules 1 through 8 specified in table 1 of this part) of the bachelor programme Creative Technology, before starting the graduation phase. The CreaTe graduation phase consists of module 11 study unit Graduation Project I (consisting of Thesis I and Academic Writing) and module 12 study unit Graduation Project II,

    Note   Students are allowed to start the graduation phase pending the completion of the core programme due to anticipated (taken but not yet graded) test or resit results. If the results are negative (failed test or resit), the student does not apply to article 2.1.2 of the Guideline for Education and Examination Regulations for Bachelor's programmes, and will be forced to stop the graduation phase.

    *Students who failed to successfully complete the core programme are allowed to continue the graduation phase **only if** an Examination Board dispensation request has been submitted. They can continue the graduation phase pending an Examination Board dispensation request. In case the Examination Board rejects the dispensation request, the student will be forced to stop the graduation phase.*b. To start the module 12 study unit Graduation Project II, students must have completed the Graduation Project I unit of module 11.

B2 – Other Programme Specific Characteristics

Art. 2.1 Language
See also the Guideline for Education and Examination Regulations for Bachelor's programmes, article 2.2.
1. The language of the programme is English. This applies both to education 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.

Art. 2.2 Student counselling
See also the Guideline for Education and Examination Regulations for Bachelor's programmes, article 5.1.
1. By Article 5.1.4 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.

Art. 2.3 Professional Development
1. Every student of Creative Technology has a mentor. Mentors are university staff members who take care of professional growth of their mentees.

Art. 2.4 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.

Art. 2.5 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 EX.
2. A student who is entitled to an exemption for a test, may decide to take the test anyway, to get a proper mark, instead of the EX.
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 F (Fail), a *Pass* is registered by code P (Pass). No numeric values are associated with these codes for the purpose of determining averages.

Art. 2.6 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 (within 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 6.0 or higher for all study units;

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

Art. 2.7 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 weighted average of the study units of the bachelor's examination, is at least 8.0. This is a weighted average based on the relative number of credits per study unit.

   b. when determining the above average, the study units for which no marks have been awarded or for which exemptions were granted will be left out of consideration;

   c. none of the study units of the examination programme has been awarded an unsatisfactory grade;

   d. no more than one study unit has been awarded less than a 7.0;

   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).

2. 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.

3. 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.

Art. 2.8 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 study unit results and not for the results of (sub)tests within the study units).
3. To receive a positive recommendation, students must adhere to the requirement of having obtained 45 EC, in accordance with article 6.2.3. of the Guideline for Education and Examination Regulations for Bachelor's programmes. 30EC of the required 45EC must be completed in two full first year modules. 15EC of 45EC can be acquired from separate study units of the remaining two first year modules.
4. Students will receive their formal recommendations by email to the official student UT address with a digital signature. The recommendations are formulated in accordance with the provisions of these regulations.

Art. 2.9 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".
2. The programme director may decide to suspend publication of the Graduation Project thesis for a limited period and to declare the information in the thesis to have a confidential status.

   a. Confidentiality can be granted for maximum of 5 years 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 defence.
   a. There is no exception to the rule that the presentation and defence are public.
   b. The contents of the presentation may be adapted to prevent confidential information becoming public.

Art. 2.10 Evaluation and safeguarding of education

1. The programme director is responsible for the evaluation of the programme.
2. The Programme director has installed an independent evaluation committee: The CreaTe and I-Tech Evaluation Committee (CRITEEC) to evaluates modules as a whole. CRITEEC organises panels with students once every module. The results of these panels are shared with the module coordinator and programme coordinator. They are later discussed with the programme director.
3. For the internal quality assurance, the following instruments are used:
   a. the UT Student Experience Questionnaire (UT-SEQ).
   b. overview of quantitative results, such as passing rates.
   c. results of CRITEEC panels.
   d. module coordinator meetings with the programme director in which the points of discussion are the evaluations mentioned in points a,b, and c.
   e. Module coordinator proposes a module improvement plan that is discussed with the programme director and published in a module manual of the next version of the module.
4. The following external evaluations are used to evaluate the curriculum and the entire programme:
   a. the National Student Survey (NSE).
   b. The International Student Barometer (www.i-graduate.org).
5. The programme committee of CreaTe/I-Tech chooses every year a few modules for evaluation. They invite module coordinators of these modules to present and discuss the evaluation results listed in 2.10.3 a,b,c, and a module improvement plan.

APPENDIX A Transitional arrangement for new Education and Examination Regulations for 2023/2024

For the students that started in the academic year 2021/22 or earlier
Article 1 deals with the general concepts of the transitional arrangements.

Article 1.1 General concepts
1. After a course is terminated in the old curriculum, there will be test-opportunities for one additional year.
2. Students who did not complete all the courses in the old curriculum after one year will be transferred to the most recent curriculum.
3. The test opportunities can be written exams or oral exams.
4. Identifiable parts of the old curriculum that were passed (and where applicable additional requirements were met), remain valid in the new curriculum.
5. In case that the weighting factors or compensation rules in the old curriculum are different from the new curriculum, the situation that is the most beneficial for the student is applied.

Article 1.2 Special transitional rules
1. Students who failed the entire module We create identity will be transferred to the new module Foundations of CreaTe.
2. Students who failed Introduction to CreaTe in 2021/22 or before will be transferred to Introduction to CreaTe and will follow Theory (covering theory and Intercultural Communication of the old curriculum) and Tools & Hackathon Theme 1 (as a replacement of the Interactive Video project). A new study unit of 4.5EC will be created for 2023/24.
3. Students who failed Web Technology will be offered a repair in the first quartile of 2023/24.
4. Students who failed Visual Communication will be offered a repair in the first quartile of 2023/24.
5. Students who failed Introduction to Computer Science can follow Introduction to Computer Science & Programming in the new curriculum and will only need to redo the Introduction to Computer Science part. Therefore, these students need to enrol to Introduction to Computer Science & Programming in 2023/24.
6. Students who failed Programming can follow Introduction to Computer Science & Programming in the new curriculum and will only have to redo the Programming part. Therefore, these students need to enrol to Introduction to Computer Science & Programming in 2023/24.
7. Students who failed Mathematics will be transferred to the new versions of Mathematics.
8. Students who failed Professional Development will be transferred to the new versions of Professional Development.Students who failed Sketching in the academic year 2022/2023 or earlier will be offered a repair either in 2022/2023 or 2023/2024.
9. Students who failed Interactive Visualization of 2EC in 2022/2023 or 1EC in an earlier year will be offered a repair in the second quartile of 2023/2024. Those students will be offered a possibility to repair the course with the number of ECs that they failed, and their grades will be registered under the old course code.
10. Students who failed Living and Working Tomorrow of 6,5EC will be offered assessment adjusted to the number of ECs they failed, not the increased number of ECs for that study unit.

APPENDIX B

Curriculum 2019-2020		Curriculum 2023-2024	EC	Grades from 2019-2020 (and before) and 2021-2022 for M11 and M12 that remain valid in 2021-2022 in case the student failed a module
Module 1: We Create Identity	15EC	**Module 1 Foundations of CreaTe**	EC	
Introduction to CreaTe		Introduction to CreaTe (consisting of: Theory & Academic skills; Tools and Hackathon Theme 1; and Tools and Hackathon Theme 2)	8.5	
Interactive video project				
Web Technology				
Mathematics				transitional agreements in Apendix A apply
Programming				
Introduction to Computer Science		Mathematics	1.5	
Visual Communication				
Professional Development		Introduction to Computer Science & Programming	4	
		Professional Development	1	
Module 2: Smart Environments	15EC	**Module 2 Smart Environments**		
Smart Environments (project)		Smart Environments core (consisting of: Smart Environments project; Smart Environments lectures; Programming and Physical Computing)	7	
Introduction to Engineering				
Ubiquitous Computing				All parts, but if SE project OR Introduction to Engineering, then SE core of 7 EC must be taken in its entirety.
Sketching		Introduction to Engineering	4	
Professional Development		Interactive Visualization	3	
		Professional development	1	
Module 3: Living & Working Tomorrow	15EC	**Module 3 Living and working tomorrow**		
Living and Working Tomorrow (project)		Living and Working Tomorrow (consisting of: Living and working tomorrow project; Human Centred Design)	7	
Human-centred Design				
Interactive Visualisation				All parts, but if Living and working tomorrow project OR Human Centred Design failed, then Fixing the Future of 7,5EC has to be taken in its entirety
Introduction to Physical Systems		Technology & Society	1.5	
Mathematics & Modelling		Introduction to Physical Systems	3	
Professional Development		Math and modelling	2.5	
		Professional Development	1	
Module 4: Art, Impact & Technology	15EC	**Module 4 Art, Impact and Technology**		
Have Fun and Play (project)		Have Fun and Play! (consisting of: Project; Design for experience)	8	
Design for Experience				
Algorithms in Creative Technology				
Statistics		Algorithms for Creative Technology	3	All parts, but IF Have fun and play project OR Design for Experience failed, then Have Fun and Play! of 8EC has to be taken in its entirety
Professional Development		Statistics	3	
		Professional development	1	

Module 5A: Smart Technology	15EC	Module 5A: Smart Technology		
Circuits & Electronics		Smart Technology Core (consisting of: Circuits and Electronics; Modelling and control; Systems and signals; Hackathon)	9.5	All parts; but IF Circuits & Electronics OR Modelling & Control OR Systems & Signals OR Smart Technology Hackathon failed, then Smart Technology Core of 9,5 EC has to be taken in its entirety.
Sensors				
Modelling & Control				
Systems and Signals				
Smart Technology Hackathon				
Literature Research Project		Sensors	3	
Professional Development		Literature Research Project	2	
		Professional Development	0.5	
Module 5B: Interactive Media	15EC	Module 5B: Interactive Media		All parts;
Interactive Media Project (Game engines, 3D modelling & animation, VR&AR, sound design, game)		Interactive Media Project & Game Engine Technology	5	
		Game design	2	
		3D Modelling and Animation	1.5	
Game Design				
Sound Engineering		Sound Engineering	2	
Mathematics for Interactive Media		Mathematics for Interactive Media	2	
Literature Research Project		Literature Research Project	2	
Professional Development		Professional Development	0.5	
Module 5B: Interactive Media (2020-2021 and 2021-2022)		Module 5B: Interactive Media		All parts, but IF IM project OR Game Engine Technology from the core failed, then IM project & GET must be taken in its entirety.
Interactive Media core	10.5	Interactive Media Project & Game Engine Technology	5	
Mathematics for Interactive Media	2	Game design	2	
Literature Research Project	2	3D Modelling and Animation	1.5	
Professional Development	0.5	Sound Engineering	2	
		Mathematics for Interactive Media	2	
		Literature Research Project	2	
		Professional Development	0.5	
Module 6: Intelligent Interaction Design	15EC	Module 6 Intelligent Interaction Design		
Human Computer Interaction (HCI) (project)		Design and Research of User Experience (consisting of: Theory; Project)	6.5	All parts; but - IF HCI project OR HCI Design and Evaluation failed, then Design and Research of User Experience of 6,5 EC has to be taken in its entirety. - IF AI theory OR AI practice failed, then AI of 5EC has to be taken in its entirety.
HCI Design and Evaluation				
AI theory		Artificial Intelligence (consisting of: Theory; Practice)	5	
AI practice				
Statistical Techniques				
Professional Development		Statistical techniques	3	
		Professional development	0.5	
Module 7: Innovation and Entrepreneurship	15EC	Module 7 From ideas to society		
Innovation & Entrepreneurship		Responsible Entrepreneurship (consisting of: Theory; Practice)	7	All parts
Theory				

Practice				
Empirical Research Methods		Empirical Research Methods	4	
Acting Responsibly		Acting Responsibly	3.5	
Professional Development		Professional Development	0.5	
Module 8: Data: from source to senses	15EC	**Module 8 Data: from the source to the senses**		
Hybrid Worlds (project)		Hybrid Worlds project	4.5	
Internet Technology		Internet Technology	2.5	
Data Visualisation		Data Visualisation	2.5	
Data Driven Applications		Data Driven Applications	2.5	All parts
ST: Biosignals & Medical Electronics		ST: Biosignals and medical electronics	2.5	
IM: Animated Storytelling		IM: Animated storytelling	2.5	
Professional Development		Professional development	0.5	
Module 11: Real World Challenges	15EC	**Module 11 Real World Challenges**		
Graduation project I		Graduation project I (consisting of: Academic writing; Thesis part I)	7	All parts; but IF Graduation project I OR Reflection failed, then Graduation project I of 7 EC has to be taken in its entirety.
Reflection				
Academic writing				
Elective (one)		Reflection	3	
Documentary Practice		Elective (one; For the study trip courses then both have to be taken)	5	
Remote care nearby		Documentary Practice		
Design of persuasive technology		Remote care nearby		
		Design of persuasive technology		
		Storytelling Through Oral Presentation		
		Study trip Preparatory	2	
		Study trip Exploratory	3	
Module 12 We Create Impact	15EC	**Module 12 We Create Impact**		
Graduation project II		Graduation project part II	13	
Reflection		Reflection	2	

Curriculum 2020-2021		**Curriculum 2021-2022**		
Module 11: **Real World Challenges**		**Module 11 Real World Challenges**		
Graduation project I	7	Graduation project I	7	All parts; but IF Graduation project I OR Reflection failed, then Graduation project I of 7 EC has to be taken in its entirety.
Reflection		Academic writing		
Thesis part I		Reflection	3	
Academic writing	3			
Elective (one, For the study trip courses then both have to be taken)	5	Elective (one; For the study trip courses then both have to be taken)	5	
Documentary Practice		Documentary Practice	-	
Remote care nearby		Remote care nearby		

Design of persuasive technology		Design of persuasive technology		
Storytelling Through Oral Presentation		Storytelling Through Oral Presentation		
Study trip Preparatory	2	Study trip Preparatory	2	
Study trip Exploratory	3	Study trip Exploratory	3	
Module 12 We Create Impact	15EC	**Module 12 We Create Impact**		
Graduation project II		Graduation project part II	13	
Reflection		Reflection	2	