



GENERAL PART EDUCATION AND EXAMINATION REGULATIONS 2024-2025

For the bachelor's programmes: Mechanical Engineering (B-ME) Civil Engineering (B-CE) Industrial Design Engineering (B-IDE)

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UNIVERSITY OF TWENTE.

PREFACE

The rights and obligations of the students on the one hand and the University of Twente on the other are laid down in the Student Charter. This contains two parts:

- The institutional part of the Student Charter, which contains the rights and obligations that apply to all UT students. The institutional section can be found at www.utwente.nl/en/ces/sacc/regulations/charter.
- Students enrolled at bilocation Amsterdam also have rights and obligations that apply to the study time at the Vrije Universiteit Amsterdam (VU). This VU section can be found at: <u>https://vu.nl/en</u>.
- The programme-specific part of the Student Charter, which is called the Education and Examination Regulations (EER), provides a broad outline of the teaching programme and examination for each degree programme. In accordance with Section 7.13, Paragraph 1, of the Dutch Higher Education and Research Act (Wet op het hoger onderwijs en wetenschappelijk onderzoek, hereafter: 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 EER is subdivided into two sections:

- A. The **general part** includes provisions that apply to all Bachelor's degree programmes of the Faculty of Engineering Technology of the University of Twente:
 - Mechanical Engineering, taught at its main campus in Enschede (referred to as B-ME UT) as well as the programme taught at its satellite location at the Vrije Universiteit in Amsterdam (referred to as B-ME UT/VU).
 - Civil Engineering (referred to as B-CE)
 - Industrial Design Engineering (referred to as B-IDE)
- B. The **programme-specific part** contains the provisions that are specific to the particular Bachelor's degree programme.

The <u>general part</u> of the Education and Examination Regulations is based on the Guideline and Model Education and Examination Regulations for all UT Bachelor Programmes. The **structure** of this Guideline and Model EER is a **format** that was adopted by the Executive Board of the University of Twente as a **guideline** under Article 9.5 WHW. That means the numbering of articles and sections must be copied to ensure transparency and consistency. The document contains (parts of) articles that must be copied in full where they concern a guideline and parts that serve as a model and may be modified. Similarly, for the <u>programme-specific part</u> of the Education and Examination Regulations, an ET guideline was provided to promote uniformity in the structure and formulation of elements that apply to all ET degree programmes.

Please note that rights can be derived from the EER by the Engineering Technology Faculty (ET) and students enrolled in its Bachelor's programme. This is not the case concerning all other written and electronic publications, such as the information on the website of the bachelor programme, the Electronic Learning Environment or the UT education catalogue. Students can always submit a request for an exception accompanied by a study plan, approved by the study advisor, to the rules described in this EER to the Examination Board.

When reference is made to an Article, Section or Rule in this regulation, this document is meant unless otherwise specified. When reference is made to the law, the Higher Education and Research Act (WHW) is meant unless otherwise specified.

The Dean of the Faculty of Engineering Technology, in view of the articles 9.5, 9.15, first SECTION (a), 7.13 first and second SECTIONs, 9.38 (b), and 9.18, first SECTION (a), and 7.59 of the Higher Education and Research Act (WHW), and in due consideration of the recommendations of the Programme Committee, as well as the approval by, or advice of, the Faculty Council, hereby adopts the ET Education and Examination Regulations.

Prof.dr.ir. H.F.J.M. Koopman Dean of the Faculty of Engineering Technology

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GENERAL PART

SECTION A1 GENERAL PROVISIONS

ARTICLE A1.1 APPLICABILITY OF THESE REGULATIONS

- 1. This general section of the education and examination regulations applies to all students enrolled in the bachelor's programmes of the Faculty of Engineering Technology: Mechanical Engineering, Civil Engineering and Industrial Design Engineering.
- 2. Students attending courses that are not part of the student's core programme (see Article 1.2) are subject to the rules laid down in the appropriate documents, such as the assessment rules laid down in the assessment schedule of the relevant study unit, or the rules laid down in the programme specific part of the EER of the coordinating degree programme. 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 <u>student charter</u> 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.
 - 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.

ARTICLE A1.2 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 or semester course
Assignment:	The execution of a design or research assignment.
Binding recommendation	A recommendation on continuation of studies as referred to in Article 7.8b,
on continuation of	paragraph 1 and 2 WHW involving expulsion from the programme in
studies (Bindend	accordance with Article 7.8b, paragraph 3 WHW, issued by the programme
studieadvies, BSA):	director on behalf of the institutional administration.
Block	A B-ME UT/VU semester is divided in three time periods of 8, 8 and 4 weeks.
Canvas	University of Twente's digital learning environment.
Colstruction	a gathering combing elements of lectures, tutorials and other teaching methods.
Core programme:	The same study units from the curriculum that apply to all the students following a programme. The minor phase is excluded.

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
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 based on acquired competencies, i.e. previously passed examinations in higher education or in view of knowledge and skills attained outside higher education.
Faculty Board: Final examination:	Head of the faculty (Article 9.12, paragraph 2 WHW). 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 (WHW):	The Higher Education and Research Act, Bulletin of Acts and Decrees 1992, 593, and its subsequent amendments (abbreviated 'WHW').
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 T.T.WHW).
Internehin:	being in a professional or scientific environment and conducting activities in
internanip.	order to increase knowledge of and insight into business and research processes.
ME	The bachelor's programme Mechanical Engineering
Mentor:	Staff member, appointed by the programme, who acts as a contact between the student and the programme in the first year and in this role represents the interests of the student, as well as fulfilling an advisory role.
Minor phase:	Elective space conferring 30 credits that the student can also fill with offer outside the core programme.
Module (UT):	 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. A module can be coherent or integrated, or a mix of those. The programme specific part states if a module is integrated, coherent or mixed 1. Coherent: A coherent module consists of study units that together comprise 15 credits. Each study unit is concluded with an examination, resulting in receiving a grade and obtaining credits when that study unit is successfully passed. Integrated: An integrated module consists of one study unit of 15 credits. That study unit contains one or more tests, resulting in one grade for the study unit, in this case the module. All tests of an integrated study unit must be successfully passed in order to obtain the credits. Mixed: A mixed module consists of multiple independent study units.

 $^{^1}$ In accordance with the information on the website $\underline{www.utwente.nl/en/educational-systems/about-the-applications/osiris/manuals-forstaff/$

MyTimetable/TE viewer:	The application used at the University of Twente to view and download the timetable of the study programme
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. This refers to participation in an educational activity designed to acquire certain skills, such as the completion of an assignment or a technological design, the execution of tests and experiments, computer work and participation in fieldwork or an excursion.
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).
Project: Semester: Student:	Design or research assignment, usually based on a real-life scenario. A half of an academic year corresponding to a total of 30 EC. Anyone enrolled in a programme in accordance with Article 7.34 and 7.37
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 unit:	A programme component as defined in Article 7.3, paragraph 2 and 3 WHW. Each study unit is concluded with an examination. An examination can consist of multiple tests. For the B-ME UT/VU programme a study unit is also called a course
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.
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. A test can consist of subtests.
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).
Thesis	a written report on a theoretical or practical assignment.
Tutorial	a (online or on Campus) gathering for a (sub) group of the population in order to allow students to process the subject matter (also known as guided independent learning).
	University of I wente
	vrije Universiteit located in Amsterdam.
UI/VU-ME	The degree programme Mechanical Engineering offered, in cooperation with the BETA faculty of the Vrije Universiteit, at location Amsterdam
vvorking 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 part of the EER, and/or the student charter or the WHW.

SECTION A2 CONTENTS AND STRUCTURE OF THE PROGRAMME ARTICLE A2.1 FINAL ATTAINMENT LEVELS AND STRUCTURE OF THE PROGRAMME

Explanatory notes: 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 part.
- 2. The programme consists of 180 credits.
 - a. The programme consists of a core programme of 120 credits, a minor phase of 30 credits and a graduation phase totalling at least 15 credits.
 - b. The core programme of the educational programme is specified in the programme-specific part.
 - c. The core programme consists of modules. The B-ME UT/VU core programme consists of semesters.
 - 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 phase 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. These conditions are specified in the relevant programme specific part.
 - 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 have completed the core of the bachelor's programme to be admitted to the graduation phase.
 - j. The examination board² 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 part describes the degree programme in accordance with Article 7.13, paragraph 2, a to e, i, l, s, t and v WHW.

ARTICLE A2.2 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.
- 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 consent of the programme committee.
- 3. If programme components deviate from the language of tuition, this is to take place in accordance with the Code of Conduct for Languages of the University of Twente and Article 7.2 WHW.

ARTICLE A2.3 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.

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.

ARTICLE A2.4 INDIVIDUALISED PROGRAMME

The examination board decides on requests for permission to take an individualised programme as referred to in Article 7.3j WHW. The examination board assesses whether an individualised programme is appropriate and consistent within the domain of the educational programme and whether the level is high enough in light of the attainment targets of the programme.

SECTION A3 TEACHING AND ASSESSMENT

ARTICLE A3.1 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 resit³ must be offered for each study unit in the same academic year. An exception may be made for practical exercises.

ARTICLE A3.2 ONLINE ASSESSMENT

- 1. If an examination or test is administered using online surveillance⁴ or online proctoring⁵, 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 <u>website</u>.

ARTICLE A3.3 RESULTS

- 1. Results of examinations, tests or components of tests must be announced to students. Osiris is used for the formal⁶ 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 10.0⁷, with grades only being rounded in the final phase⁸ of the assessment of a study unit and in accordance with the schedule below:

If figure before the decimal (n)≠5			
Grade≥ n.00 and <n.25< td=""><td>1</td><td>n.0</td></n.25<>	1	n.0	
Grade ≥n.25 and <n.75< td=""><td></td><td>n.5</td></n.75<>		n.5	
Grade ≥n.75 and <(n+1).00		(n+1).0	
If figure before the decimal =5:			
Grade ≥ 5.00 and < 5.50		5.0	
Grade ≥ 5.50 and <6.00	→	6.0	

- 6. Examination results of 6.0 or higher are a pass.
- 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.

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 case of any discrepancy between results published in Osiris and results communicated via any medium other than Osiris (e.g. Canvas, email), the results in Osiris will prevail. Article 8.2 still applies.

⁷ In Osiris, a comma is used, based on the Dutch grading system (e.g. 7,0).

⁸ Final phase: when all grades are known.

ARTICLE A3.4 MODULE/SEMESTER

- 1. Each module has a module coordinator, appointed by the programme director. The B-ME UT/VU semester has a semester coordinator.
- 2. If a module/semester comprises a single study unit then the examiner of that study unit will also be the module/semester examiner.

ARTICLE A3.5 REGISTRATION

- 1. Registration in Osiris is required prior to participating in a module or study unit⁹.
- 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. The student is automatically de-registered from the resit opportunity if a sufficient grade is obtained for the first test opportunity. In such case, students still have the opportunity to re-register for the resit on their own initiative if they wish to make use of that resit opportunity, despite having obtained a sufficient grade for the first test opportunity¹⁰.

ARTICLE A3.6 DESCRIPTION OF MODULES/SEMESTERS AND ASSESSMENT SCHEDULE

- 1. The programme-specific part contains a description of each module/semester.
- 2. The module/semester description must include:
 - a. the study units comprising the module/semester and the number of related credits;
 - b. if applicable¹¹, 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 set (oral, written or an alternative manner).
- 3. The assessment schedule of a module/semester course 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/semester course must include:
 - a. how the learning objectives of the module/semester course or the study units of the module/semester course are assessed and when they are attained;
 - b. the period of validity of the result of the test or tests;
 - c. in which weeks examinations, tests, resits and discussions (Article 3.10) are held (the precise times and dates will be announced via MyTimetable/TE viewer);
 - 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/semester 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.

⁹ The applicable registration deadlines are mentioned on the webpage <u>www.utwente.nl/en/education/student-</u>

services/education/courses-and-modules/

 ¹⁰ www.utwente.nl/en/ces/sal/exams/participants/
 ¹¹ As with integrated modules or larger study units.

ARTICLE A3.7 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 A3.8 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 examination or test and determine the grade.

ARTICLE A3.9 PERIOD OF VALIDITY OF RESULTS

- 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 programme specific part and mentioned in the assessment schedule in accordance with Article 3.6 paragraph 5.
- 3. If the period of validity of a result of an examination is limited as described in paragraph 1, at least the rules in Article 6.2 paragraph 6 of these regulations and Article 7.10 paragraph 4 WHW are taken into account by the examination board when assessing the extension of the limited validity period.

ARTICLE A3.10 RIGHT OF DISCUSSION AND INSPECTION

- 1. Students are entitled to discuss and review their test together with the examiner, and the examiner is to explain the assessment. This can be done individually or in a group setting, either in person or by using an online tool. The examiner chooses the setting of, methods of and tools for discussion.
- 2. Individual and group discussions must take place no later than five weeks after the publication of the test or examination results, but at least three working days prior to the next test opportunity, in the (online) presence of the examiner or a substitute designated for that purpose.
- 3. If the examiner organises 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 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.
- 4. 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.
- 5. Students are to be given the opportunity to inspect their assessed work for a period of two years following the assessment.

ARTICLE A3.11 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 A3.12 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 education in the programme is evaluated.

SECTION A4 EXAMINATIONS

ARTICLE A4.1 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 A4.2 FINAL EXAMINATION AND DEGREE

Explanatory notes: Article 7.10, paragraph 2 and Article 7.11 WHW

- The bachelor's final examination is considered to be complete when the student has passed all study unit examinations in the bachelor's programme. The Examination Board may, under conditions that it has set, determine that not every examination has to be completed successfully to determine that the bachelor's final examination has been successfully completed. (Article 7.12b paragraph 3 WHW)
- 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 cases¹², 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 A4.3 DIPLOMA

Explanatory notes: Article 7.11 WHW

- 1. The examination board will award a diploma as proof that the student has satisfied all the requirements of the final examination 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);
 - 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;

¹² 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.

- 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. The programme director determines if a special distinction (such as cum laude) is applicable to the degree programme, and determines the requirements to qualify for a special distinction. Information about the rules, requirements and considerations for awarding cum laude . Awarding the diploma and (the consideration for) awarding a distinction such as cum laude lies with the examination board¹³. 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.

¹³ Personal circumstances are taken into account. If it considers activism, an acknowledged fulltime board year is excluded from the calculation of the nominal study load for cum laude.

SECTION A5 STUDENT GUIDANCE

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

ARTICLE A5.1 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 A5.2 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.
- 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.

SECTION A6 STUDENT PROGRESS EVALUATION (BSA)

Explanatory notes: Article 7.8b WHW.

ARTICLE A6.1 PRELIMINARY RECOMMENDATION ON CONTINUATION OF STUDIES

- 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).
- Deviation from paragraph 1 is only allowed in case a UT degree programme, offered at the Vrije Universiteit ('VU-UT programme') wants to issue only one preliminary advice, since the VU works with semesters. All other rules still apply. If and how the programme deviates, is described in the programme-specific part.

ARTICLE A6.2 (BINDING) RECOMMENDATION ON CONTINUATION OF STUDIES

- Students receive a written recommendation on continuation of studies, at the latest by the end of the first academic 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 attained¹⁴.

- 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 programmespecific 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.

- 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). The application must be submitted before the 1st of July in the academic year to which it relates. 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.

¹⁴ 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.

- 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 (student activism) 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 A6.3 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 academic 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 A6.4 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.

- 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.

SECTION 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 III People Act (WGBH/CZ).

ARTICLE A7.1 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 following the degree 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 A7.2 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, examinations 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 examination 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.

SECTION A8 FINAL PROVISIONS

ARTICLE A8.1 CONFLICTS OF 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 A8.2 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 A8.3 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 A8.4 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 test or examination 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.
- In exceptional cases and to the student's benefit, the examination board may deviate from the prescribed number of opportunities to sit examinations and/or tests related to study units that have been dropped from the curriculum.

ARTICLE A8.5 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 A8.6 APPEAL AND OBJECTIONS

An appeal and objections must be submitted in writing to the <u>University of Twente Complaints Desk</u> within six weeks after notification of a decision to the student.

ARTICLE A8.7 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.

This decision must be motivated and announced in writing to all bodies involved.

ARTICLE A8.8 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 A8.9 ENTRY INTO FORCE

These Regulations enter into force on 1 September 2024 and replace the Regulations dated 1 September 2023. Adopted on 1 September 2024 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.





PROGRAMME-SPECIFIC PART EDUCATION AND EXAMINATION REGULATIONS 2024-2025

For the bachelor's programme of: Mechanical Engineering (B-ME)

REFERENCE: DATE:

UNIVERSITY OF TWENTE.

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PROGRAMME-SPECIFIC PART

The regulations are part of the programme-specific component of the students' charter, including the Education and Examination Regulations (EER), of the Mechanical Engineering bachelor programme of the University of Twente's Engineering Technology Faculty.

SECTION B1 GENERAL

ARTICLE B1.1 LANGUAGE

- 1. The language of communication, instruction and examination in the bachelor programme is English.
- 2. The BSc-thesis is executed in English. Exceptions require approval of the Examination Board before the start of the thesis. If an exception is granted, the student is obliged to provide an executive summary of the final report in English.

ARTICLE B1.2 SAFETY

Working in a laboratory or workshop is subject to certain safety requirements. Students are obligated to inform themselves of these rules and comply with them. To be allowed to work in a laboratory or workshop, the student must be registered as a student at the UT.

SECTION B2 CONTENTS AND STRUCTURE OF THE PROGRAMME ARTICLE B2.1 AIM OF THE PROGRAMME

This programme educates bachelors to a junior-academic level of working and thinking. Educating an attitude and skills directed towards solving problems and designing new products, processes and systems. The development of the communication and social skills that are necessary to perform satisfactorily as a bachelor in a multidisciplinary team is an integral part of the programme. The programme covers the foundations of the broad field of mechanical engineering, with an emphasis on practical applications of knowledge, the generalisation of specific knowledge into universal solutions or methods, and the development of the student's learning capacity.

ARTICLE B2.2 PROGRAMME INTENDED LEARNING OUTCOMES

The qualities relating to the knowledge, understanding and skills that the student should have acquired upon completing the programme are as follows (Article A2.1.1 of the General Part):

The objective of the programme is to educate bachelors with a particular focus on attaining the following competences:

- a. Comprehensive and thorough technical and scientific knowledge of the various fields of mechanical engineering (mechanics, fluid mechanics, heat transfer, energy, systems and control, dynamic systems, design and construction) and the skills to use this knowledge effectively.
- b. Thorough knowledge of mechanical engineering methods, paradigms and tools to analyse and interpret data.
- c. The ability to contribute to the solution of mechanical engineering problems using a systematic approach that includes analysis, the formulation of subproblems and the evaluation of the implementation.
- d. The ability to integrate theory and practice from a range of mechanical engineering subjects.
- e. The ability to apply techniques, skills and modern engineering tools whenever relevant for mechanical engineering practice.
- f. The ability to design a mechanical system, component or process that meets the desired needs within defined boundary conditions.
- g. The ability to effectively communicate with professionals about one's own work and its relevance and impact in various contexts.
- h. The ability to operate as part of a (interdisciplinary and international) team, to take initiative, and to recognise and fill gaps in one's knowledge.
- i. The ability and attitude to evaluate the impact of one's own work from a technological, social and ethical perspective and take professional responsibility for one's decisions.
- j. The ability to continue one's education in a subsequent master's programme.
- k. The attitude and ability to maintain and continuously improve one's academic and professional skills (life-long learning).

In the B-ME UT programme, during the first and second year of the programme, academic competences are taught as part of the "Academic skills" study line. During the third year, these competences are part of Academic Research & Skills and the Bachelor and Societal Embedding Assignment.

In the B-ME UT/VU programme, during the whole programme, academic and professional skills are taught as part of the "Project & Academic skills" study line. Parallel to the BSc assignment in the third year the academic skills are part of Research Skills.

Academic competences include e.g. teamwork, presentation skills, self-reflection/feedback, ethics for engineers, academic English, conducting scientific research and orientation and information regarding further education.

ARTICLE B2.3 STRUCTURE IN GENERAL

- 1. The bachelor's programme is a 3-year full-time programme. An academic year is divided into four quartiles with a schedule of ten (or eleven) weeks (B-ME UT) or two semesters with a schedule of 8, 8 and 4 weeks (B-ME UT/VU).
- 2. The total study load is 180 EC (1 EC = 28 hours of study): 150 EC for the core programme (major) and 30 EC for the minor.
- The core programme (major) consists of 10 coherent UT modules (B-ME UT) or 5 semesters (B-ME UT/VU) in which disciplinary knowledge, skills and attitude are developed and assessed in the most coherent way possible. These modules / semesters are made up of different, interconnected

study units with varying EC' counting up to 15 EC / 30 EC. A study unit may consist of multiple 'parts of a study unit'.

- a. Modules 1-4 (B-ME UT) or semester 1 and 2 (B-ME UT/VU), provided in the first year of the programme, offer an introduction to mechanical engineering. These modules or semesters are orientational and selective (selective because of the Binding Recommendation at the end of the first year).
- b. Modules 5-8 (B-ME UT) or semester 3 and 4 (B-ME UT/VU) cover the second year of the programme and contain integrated topics. Students are provided with more in-depth knowledge.
- c. The third year of the programme consists of the Minor phase (Modules 9 and 10 or semester 5) and the graduation phase of 15/30 EC (Modules 11 and 12 or semester 6).
- 4. Each module/semester of the study programme in year 1 (B1) and year 2 (B2) of the programme has a practical exercise in the form of a project that is an integral part of the module/semester. In addition, other practical exercises may be part of study units throughout the entire programme. More information on these practical exercises can be found in the descriptions of the study units of the study programme on Osiris and/or Canvas.

ARTICLE B2.4 DESCRIPTION OF MODULES/SEMESTERS AND STUDY UNITS

- 1. As required by Article A3.6 of the General Part, Table 1-6 lists the modules/semesters, the study units and the corresponding study load (EC) for study units. If applicable the number of tests, their form, their relative weighting and any required prior knowledge, can be found in Osiris.
- 2. The formal sequence of the study units and their exams is the order as recorded in the tables.
- 3. Possible prerequisites are listed in Osiris.
- 4. More extensive module and/or study unit descriptions can be found in the <u>Osiris</u> course catalogue and relevant Canvas pages.
- 5. When students follow study units organised by other UT degree programmes or other educational institutes, then the Education and Examination Regulations, as well as the Rules and Regulations of the related Examination Board, of that programme apply. If no regulations are available the ME Examination Board will take a decision.

Table 1: Description of Modules Year 1 (B-ME UT). * Modules/study units that can be followed by students from other programmes and/or exchanges students.

#	Module/study unit code	Module/study unit name	EC
1	202300048	ME - 1 - Design and Manufacturing	15
	202300049	Statics *	2.0
	202300050	Modelling and Programming 1*	1.0
	202300051	Technical Product Definition	1.5
	202300052	Manufacturing Systems	2.5
	202300053	Project Design of a Mechanical Tool & Ac. Skills 1	4.0
	202300054	TIME *	1.5
	202300055	Calculus 1A	2.5
2	202000108	ME - 2 - Energy and Materials	15
	202300056	Engineering Thermodynamics 1 *	3.0
	202300057	Modelling and Programming 2 *	1.0
	202000110	Materials Science 1 *	3.0
	202000111	Project Analysis of an Energy System & Ac. Skills 2 (≥ week 4)	4.0
	202000112	Project Design of a Mechanical Tool & Ac. Skills 1 (week 1, 2)	1.0
	202001201	Calculus 1B	3.0
3	202000114	ME - 3 - Energy and Sustainability	15
	202300058	Engineering Thermodynamics 2 *	1.5
	202300059	Modelling and Programming 3 *	1.5
	202000116	Materials Science 2 *	2.0
	202000117	Introduction to LCA	2.0
	202000119	Project Design of an Energy System & Ac. Skills 3	5.0
	202001218	Calculus 2	3.0

4	202000121	ME - 4 - Design and Mechanics	15
	202300060	Mechanics of Materials *	3.0
	202300061	Modelling and Programming 4 *	1.5
	202000282	Machine Elements *	3.0
	202300283	Project Design of a Construction & Ac. Skills 4	4.5
	202001210	Linear Algebra	3.0

Table 2: Description of Modules Year 2 (B-ME UT). * Modules/study units that can be followed by students from other programmes and/or exchanges students.

#	Module/study unit code	Semester/study unit name	EC
5	202000126	ME - 5 – Dynamic Systems *	15
	202000127	Dynamics 1 *	4.0
	202000128	System Analysis *	4.0
	202000129	Design Principles & Ac. Skills 5	5.0
	202001228	Vector Calculus	2.0
6	202000131	ME - 6 - Product Design	15
	202000132	Processing and Properties of Polymers 8	3.0
	202000133	Elasticity Theory *	2.0
	202000134	Tribology *	2.0
	202300135	Project Product Design & Ac. Skills 6	8.0
7	202000137	ME - 7 - Fluid Mechanics & Heat Transfer *	15
	202000138	Fluid Mechanics 1 *	3.5
	202000139	Heat Transfer *	3.5
	202000140	Project Fluids Engineering & Ac. Skills 7	8.0
8	202000142	ME - 8 - Mechatronic Design	15
	202000143	Dynamics 2 *	4.5
	202000144	System and Control Engineering *	4.0
	202000145	Project Mechatronics & Ac. Skills 8	6.5

Table 3: Description of Modules Year 3 (B-ME UT). * Modules/study units that can be followed by students from other programmes and/or exchanges students.

#	Module/study unit code	Semester/study unit name	EC
9	Na	ME - 9 - Minor	15
10	Na	ME - 10 - Minor	15
11	202000147	ME - 11 - Production Systems Engineering *	15
	202000148	Statistics	2.5
	202000149	Introduction to Finite Element Method *	3.5
	202000150	Academic Research & Skills	3.5
	202000151	Project Production Systems Engineering	5.5
12	202000153	ME - 12 - ME Bachelor Assignment	15
	202000154	ME BSc Research Assignment	12.0
	202000155	ME BSc Societal Embedding Assignment	3.0

Table 4: Description of Semesters Year 1 (B-ME UT/VU).

#	Semester/study unit code	Semester/study unit name	EC
1	201900008	Manufacturing	30
	201900010	Statics	4
	201900011	Mechanics of Materials	4
	202400445	Mathematics: Linear Algebra & Calculus 1	4
	202400446	Project & Academic Skills 1: Manufacturing	7.5
	201900014	Intro to Mechanical Engineering	1
	201900013	Manufacturing 1	5
	201900012	Materials Science: Metals and Alloys	4
	201900016	Continuous Assessment 1	0.5

2	201900017	Energy Transition & Sustainability	30
	201900020	Thermodynamics	7.5
	202400447	Mathematics: Linear Algebra & Calculus 2	4
	201900019	Project & Academic Skills 2: Energy Transition & Sustainability	9
	201900022	Design Engineering	1.5
	201900024	Life Cycle Analysis	3
	201900023	Manufacturing Systems	2
	201900021	Renewable Energy Technology	2.5
	201900025	Continuous Assessment 2	0.5

Table 5: Description of Semesters Year 2 (B-ME UT/VU).

#	Semester/study unit code	Semester/study unit name	EC
3	202400448	Smart Manufacturing Systems	30
	20200008	Dynamics	3.5
	202000009	Mechanical Vibrations	3.5
	20200007	Mathematics: Differential Equations	4
	202400449	Project & Academic Skills 3: Smart Manufacturing Systems	8.5
	202000013	Manufacturing 2	3.5
	202000022	Smart Industry	2.5
	202000010	Materials Science: Polymers	2
	202000011	Tribology	2
	202000015	Continuous Assessment 3	0.5
4	202000016	Technology for Healthcare	30
	202000021	Elasticity Theory + FEM	3.5
	202100008	Mathematics: Vector Calculus	2
	202400450	Project & Academic Skills 4: Technology for Healthcare	11
	202000020	Precision Engineering	2
	202000019	Control Engineering	4
	20200018	System Analysis	3
	202000012	Signal Analysis	2
	202000023	Systems Engineering	2
	202000015	Continuous Assessment 4	0.5

Table 6: Description of Semester Year 3 (B-ME UT/VU).

#	Semester/study unit code	Semester/study unit name	EC
5	Na	Minor	30
6	202100007	Thermal & Fluid Engineering and BSc Assignment	30
	202100009	Fluid Mechanics	3.5
	202000017	Mathematics: Statistics & Probability	2
	202100011	Project & Academic Skills 5: Thermal & Fluid Engineering	3
	202100010	Heat Transfer	3.5
	202100012	BSc Assignment	12
	202100013	Research Skills	5
	202100014	Continuous Assessment 5	1

ARTICLE B2.5 ADMISSION REQUIREMENTS

- 1. Before the start of a study unit, the student must meet the prerequisites and/or subject-specific requirements for that study unit as mentioned in Osiris.
- Students are entitled to start with the project of module 8 if the students have successfully completed Dynamics 1 or System Analysis in module 5 and have to resit no more than one study unit of module 4 (B-ME UT).
- 3. Students are entitled to start with the minor phase (Article 2.7) in the third year after having:
 - a. completed the first academic year (60 EC), and
 - b. obtained at least 30 EC from the second academic year, and

- c. have no more than 4 EC of unfinished courses of previous years that are delivered concurrently with the quartile of the minor (B-ME UT) or no more than 8 EC of unfinished courses of previous years that are delivered concurrently with the semester of the minor (B-ME UT/VU).
- 4. Writing the proposal for the BSc assignment is possible in Q3 (AR&S in module 11) or in Q1 (ARS in pre-master, entrance has to be requested via the study adviser). The execution of the BSc assignment research cannot start before the proposal is graded with a pass. Students are recommended to plan the execution of their BSc assignment research in a consecutive time period of 10 weeks full-time prior to one of the BSc conferences. The conferences are held in early July, end of August and end of January. Conference registration two and a half weeks before the conference date is mandatory and should be approved by the supervisor. Upon registration for the conference, the student must have passed 60 EC from modules 1 4 and at least 53.5 EC from modules 5 8. Exceptions to this entry requirement can be granted by the examination board based upon a study plan approved by the study advisor, i.e. in case of excessive study delay (B-ME UT).

Writing the proposal for the BSc assignment is possible in the first half of the spring semester (Project & Academic Skills in Block 16, Research Skills Block 17) or in the first half of the fall semester (self-study). The execution of their BSc assignment research cannot start before the proposal is graded with a pass. Students are recommended to plan the execution of their BSc assignment research in a consecutive time period of 10 weeks full-time prior to one of the BSc conferences. The conferences are held in early July, end of August and end of January. Conference registration two and a half weeks before the conference, the student must have passed 60 EC from semester 1 and 2 and at least 53.5 EC from semesters 3 and 4. Exceptions to this entry requirement can be granted by the examination board based upon a study plan approved by the study advisor, i.e. in case of excessive study delay (B-ME UT/VU).

ARTICLE B2.6 SIMULTANEOUSLY FOLLOWING COURSES FROM MULTIPLE MODULES

- 1. Although the study units are registered separately, the study units within a module are coherent and should be taken together as much as possible.
- 2. Passing study units of the lowest unfinished academic year shall be prioritised
- 3. For the benefit of the student's study progress and to avoid (further) delays, students who have to redo (parts of) a module are not allowed to participate in more than 18 ECs of study units without a study plan that is developed in consultation with the study adviser and approved by the programme coordinator.
- It is not allowed to enrol in two projects in the same quartile (B-ME UT) or semester (B-ME UT/VU). Exceptions can be granted by the examination board, based upon a study plan approved by the study advisor.

ARTICLE B2.7 MINOR PHASE

- 1. The minor is a structured, coherent and complete educational package of academic level corresponding to the level of a third-year student. The minor consists of several study units worth a total of 30 credits which contribute to the students' general academic competences and/or to the enrichment of their knowledge and skills in a specialist field.
- 2. Students can choose (a combination of):
 - a. Specialisation minors that deepen the knowledge of the bachelor's programme
 - b. High Tech Human Touch (HTHT) minors
 - c. Educational Minor or Crossing Borders
 - d. Other UT minors from which students may choose are outlined in the minor admission matrix, which is available on the <u>UT minor website</u>.
 - e. Transfer minor (transfer to a master of another educational programme) by means of a Premaster's programme as a Minor.
 - f. <u>Minor at another educational institute</u>: instead of attending modules at the UT, students can include another Minor in their programme, consisting of components offered outside the University of Twente. In that case a written approval of the Examination Board is required. Such free minors must meet the following criteria:
 - i. The minor should be of a sufficient (bachelor's) level.
 - ii. In case of overlap, the examination board decides if the amount of overlap is allowed.

- iii. A non-UT module has a maximum of 1 language course for which the institution grants a maximum of 5 EC, excluding academic language subjects.
- g. An internship
- 3. For the standard UT minors, students must apply for the minor via Osiris before the date set by the minor's organisation and enrol in the minor in question via Osiris before the start of the minor. In general, students should start arranging for a minor abroad in the first semester of the second year. For some combinations of the programme itself and the minor, scheduling conflicts (being unable to participate in all scheduled activities or an uneven division of the study workload) are unavoidable.
- 4. Studying abroad requires consultation with the Exchange Coordinator and approval of the Examination Board.

ARTICLE B2.8 CONNECTING MASTER'S PROGRAMMES

- 1. Successful completion of the bachelor programme provides direct admission to the master programmes Mechanical Engineering, Robotics and Sustainable Energy Technology of the University of Twente.
- 2. The Education and Examination Regulations (EER) of the Master's programme provides information on any pre-master programmes.

ARTICLE B2.9 QUALITY ASSURANCE

The quality of education is systematically monitored according to the Plan-Do-Check-Act (PDCA) cycle. The quality assurance system consists of at least the following parts:

- 1. The organisation within the faculty (with all actors who play a role in the management, organisation, development and execution of the study programme. Through a clear division of tasks and responsibilities and mutual coordination, the actors jointly ensure a high-quality study programme).
- 2. The evaluation system that monitors the quality of the study programme and provides the actors with information on the quality and is therefore aimed at educational development and continuous quality improvement. This will at least include the execution of the following activities on an annual basis:
 - a. The programme director writes an annual programme development plan, which is subject to advice from the programme committee. Improvement points regarding the study units are made available to students and staff.
 - b. **Questionnaires at the end of each module or project:** participating students are asked to fill out questionnaires at the end of each module.
 - c. **Study unit or module evaluations:** a module or semester will be evaluated at least once every three years; if a study unit does not meet the criteria, it will be evaluated again the next time it is taught to determine whether appropriate measures have been taken.
 - d. **Incidental activities:** if necessary, further research will be conducted in addition to the aforementioned activities (e.g. research into facilities, time usage studies, exit studies, questionnaires among alumni, etc.).
 - e. **Panel discussions:** halfway through and/or at the end of a module, lecturers and students will engage in discussions to exchange thoughts and experiences.
 - f. NSE & NAE provide input for possible improvements within the programme.
- 3. Teachers within the programme are required to acquire their University Teaching Qualification (UTQ) within 3 years after starting.

SECTION B3 TEACHING AND ASSESSMENT

ARTICLE B3.1 ASSESSMENT IN GENERAL

- 1. Each study unit examination consists of one or multiple assessment methods. These may include individual and group assessments, such as written and oral tests, written assignments, project assignments, practical exercises and different forms of presentations (e.g., poster and pitch).
- 2. Oral examinations and other examination components not listed in the assessment schedule will be held at a time set by the examiner(s) and the student together and, if the student so desires, within a month after the conclusion of the education for the examination unit in question.
- 3. Absence during a study period may result in the failing of tests, examinations, projects, or practical exercises. In the event of force majeure (e.g. illness), the student must contact the lecturer and study adviser as soon as possible.
- 4. A request for an exemption of one or multiple tests or examinations (Article A2.3.1 of the General Part) will be judged by the Examination Board on the conditions set out in its Rules and Regulations.
- 5. Information on the practical procedures regarding the course of examinations and completing projects is available in the Rules and Regulations of the Examination Board.
- 6. Unless otherwise stated, practical exercises or projects can, generally, only be done once per academic year.
- 7. Default mode of examinations is on-site.

ARTICLE B3.2 RESULTS

In addition to Article A2.5 of the General Part the following programme-specific rules regarding results apply.

- 1. If a written test has been completed (passed with 5.5 or higher) the student may retake the test during a regular, scheduled retake.
- 2. For all other test types (e.g., assignments or presentations) the grade is final if the test has been completed (passed with 5.5 or higher). If a student would like to upgrade their grade next academic year (due to exceptional circumstances), the student must have a written confirmation from the examination board.
- The following applies for passing a project: The grading of the project should be stated in the project description and should be available at the start of the project. There should be a resit for every subject.

ARTICLE B3.3 PERIOD OF VALIDITY OF RESULTS

Exceptions to the period of validity of the results as described in Article A3.9 of the General Section are listed here.

All grades registered in OSIRIS remain valid indefinitely.

SECTION B4 FINAL EXAMINATION

ARTICLE B4.1 GENERAL

- 1. The duration of the BSc research assignment corresponds with the study load of 12 EC.
- 2. If an extension is needed the student can file a substantiated request for an extension to the examination board supported by a study plan validated by the study adviser and the daily supervisor.

ARTICLE B4.2 REQUIREMENTS

- 1. Generally the bachelor research assignment is an internal assignment provided by the University of Twente or an external graduation assignment provided by another university, a research institute, or a company.
- 2. The protocol for registration, acquiring and carrying out the bachelor's thesis project is set out in the manual 'BSc Assignment Mechanical Engineering'.
- 3. The requirements for passing the bachelor research assignment are described in the manual 'BSc Assignment Mechanical Engineering'.

ARTICLE B4.3 GRADUATION COMMITTEE

- 1. The graduation committee assesses the students' work and is present at the final examination.
- 2. The committee consists at least of three people:
 - a. The chair is an assistant, associate or full professor appointed by the examination board. One of the three ME staff members is preferred to be the daily supervisor.

ARTICLE B4.4 WITH DISTINCTION / CUM LAUDE

As required by Article A4.3 of the General Part, we describe here the criteria for receiving a distinction upon graduation.

- 1. When students have demonstrated exceptional competence and ability in their bachelor programme, this can be stated on the diploma with the words 'Cum Laude'.
- 2. The Examination Board awards the 'Cum Laude' judicium when a student meets each of the following conditions:
 - a. The average of the examination grades for the study units of the ME BSc programme, excluding project grades and the study units of the first semester of the third academic year (minor), is at least 8.0.
 - b. When calculating the aforementioned average, study units that were not evaluated with a grade or for which an exemption was given are not included.
 - c. Exemptions were granted for no more than a fourth of the total bachelor programme.
 - d. The grade for the bachelor research assignment is at least 8.5.
 - e. Any additional study units (not part of the regular ME BSc programme) are not included under the aforementioned regulations.
 - f. The bachelor programme was completed within four years, unless exceptional circumstances, in the opinion of the examination board, justify a greater exceeding of the study duration. These exceptional circumstances include the conditions that are grounds for granting graduation support.
 - g. No formal record of fraud is documented in the students' file.

If these guidelines are not fully met, the programme director can submit a substantiated proposal to the examination board to award the designation 'Cum Laude'. In that case, the special circumstances and the exceptionality of the achievement must be properly substantiated.

SECTION B5 STUDENT GUIDANCE

In addition to the stipulation of Article A5 of the General Part.

ARTICLE B5.1 STUDY ADVICE

- 1. If a student thinks they are confronted with personal circumstances that could influence their study progress, it is the responsibility of the student to report these circumstances to a study adviser immediately or as soon as possible.
- 2. The permission for extra facilities as mentioned in Article A5.2 of the General Part is mandated to the study adviser.
- The study adviser will upon or without request advise the examination board, the programme director, individual lecturers/examiners and students regarding any problems with the study workload or study progress of individual students or groups of students.
- 4. If a student wishes to make an appointment from which rights can be derived, the agreements between the student and the study adviser need to be approved by the Examination Board.

ARTICLE B5.2 STUDY GUIDANCE FIRST YEAR STUDENTS

- First-year B-ME UT students will be assigned a mentor and a study adviser at the start of their programme. The mentor and the study adviser are connected to the programme as an employee. The mentor is the first point of contact and supervises and advises students during the first year of their bachelor programme. First-year B-ME UT students will be invited for a mandatory introductory meeting by their mentor at the start of their programme. Furthermore, the mentor will periodically discuss the students' study progress with them if their results provide reason to do so. In case of more study related problems or personal circumstances the study adviser can be contacted.
- 2. First-year B-ME UT/VU students will be invited for a mandatory introductory meeting by the study advisers at the start of their programme. The students can choose either study adviser. The study advisers are connected to the programme as an employee. The study adviser supervises and advises students during their bachelor programme. Furthermore, the study adviser will periodically discuss the students' study progress with them if their results provide reason to do so.

SECTION B6 STUDENT PROGRESS EVALUATION

ARTICLE B6.1 RECOMMENDATION ON CONTINUATION OF STUDIES

At the end of their first academic year of registration for the degree programme, every student is given a definitive written recommendation about continuing their studies within the degree programme (Articles A6.2 and A6.3 of the General Part).

Students of the B-ME UT/VU programme receive only 1 preliminary recommendation on the continuation of studies, as described in Article 6.1.3 of the General Part.

SECTION B7 FINAL PROVISIONS

ARTICLE B7.1 TRANSITIONAL ARRANGEMENT Any active transitional arrangements are mentioned below.

NA

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