

***Rules of the Examination Board
for the bachelor's programme in
Chemical Science & Engineering
as of 1 September 2021***

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Definition of terms

Paragraph 4 of the general section of the programme part of the student charter, including the education and examination regulations (EER) for the Bachelor's programmes Advanced Technology, Biomedical Engineering, Health Sciences, Chemical Science & Engineering, Technical Medicine, Applied Physics (hereinafter the general section of the EER), defines the testing procedures: art. 4.3 Registering for a module, a study unit and tests, art. 4.4 Module description and assessment plan, art. 4.5 Oral tests, art. 4.6 Term assessment, date of exam or test, art. 4.7 Period of validity, art. 4.8 Right of discussion and review and art. 4.9 Retention period for tests. For the rules of the Examination Board the following definitions from Art. 1.2 in the general section of the EER apply:

Examination Board	The body that establishes objectively and expertly whether a student meets the criteria set in the education and examination regulations regarding knowledge, insight and skills needed for obtaining a degree.
Examiner	The individual who has been appointed by the Examination Board in accordance with Article 7.12c of the WHW to hold exams and tests and determine their results.
Module	A total of 15 EC of one or more study units in which disciplinary knowledge, skills and attitude are developed and assessed in an as integrated and/or coherent way as possible.
Module coordinator	The individual charged by the programme board with organising the module.
Module part	A part of a module.
Study unit	A component of the programme as described in Article 7.3, paragraphs 2 and 3 of the WHW. Every study unit concludes with an exam.
Exam	An evaluation in a study unit of the knowledge, understanding and skills of the student, as well as the assessment of the results of this evaluation (Article 7.10 of the WHW); an exam may consist of a number of tests.
Test	An evaluation of the knowledge, understanding and skills of the student, as well as the assessment of the results of this evaluation. A test is a part of an exam. If a study unit has only one test, this coincides with the exam for the unit in question.
Assessment plan	A plan indicating how the testing of a module is organised. At first, it states the grading of the study units of the module, and secondly, the conditions for passing the entire module (including possible compensation rules within the module and compensation rules for study units or parts of study units of different modules).
WHW	The Higher Education and Research Act (WHW), in the Dutch Bulletin of Acts and Decrees 1992, number 593, and as amended since.

In addition to the definition of terms specified in article 1.2 of the general section of the EER, these Rules of the Examination Board understand the following as meaning:

Project	Part of a module in which different subject domains are integrated.
Student Information System	The system indicated by the institutional administration for the registration of and information on all relevant data on students and programmes, in the sense of the WHW.

Article 1 The Examination Board

1. From among its members, the Examination Board appoints a chairperson and a secretary.
2. The Examination Board may be assisted by programme staff, e.g. the programme director, the programme coordinator, the study adviser, and tutors. These parties attend meetings in an advisory capacity.
3. The Examination Board can request the advice of study advisers and other study counsellors regarding decisions to be made concerning individual students; all information provided on students will be treated as confidential.
4. The Examination Board can, as far as this is not in conflict with the law or with this regulation, decide to delegate some of its responsibilities, possibly subject to limiting conditions, to the chairperson or the secretary of the Examination Board.
5. A staff member of the Centre for Educational Support of the Faculty of Science and Technology (CES-TNW) will attend the meetings of the Examination Board as administrator.
6. The meetings of the Examination Board are closed to the public. The decisions of the Examination Board and the outcome of votes are recorded in the meeting minutes.
7. The Examination Board uses a set of rules which define (1) the composition, (2) the working methods, (3) delegation of responsibilities to the chairperson and the secretary, and (4) the division of duties with respect to testing supervision.

Article 2 Examiners

1. For the purpose of holding the exams and tests, the Examination Board appoints one or more examiners for each study unit. Only staff members who teach, as well as non-university experts can be appointed as examiners (WHW Art. 7.12). If there is more than one examiner, one of them is appointed as the examiner responsible. The examiner responsible determines the result of the exam for the entire study unit (elaboration of WHW art. 7.12c paragraph 1).
2. The chairperson of the final Bachelor's assignment committee acts as the examiner responsible for the final Bachelor assignment.
3. The examiners will provide the Examination Board with the requested information (WHW Art. 7.12c paragraph 2).

Article 3 Contents and form of exams and test format

1. Before an examiner holds a written test, at least one other qualified lecturer will assess whether the proposed test is sufficiently representative, whether the questions have been clearly stated, and whether the level of difficulty is in accordance with the programme.
2. The description in the course catalogue defines whether the final assessment of a study unit will be performed in writing, orally or by means of another method. An assessment plan has been established for all study units. This assessment plan must have been published no later than two weeks before the start of the study unit.
3. The student can request another testing method from the Examination Board than the method determined in the second paragraph of this article.

Article 4 Written and oral tests

1. A written test has a maximum duration of 3 hours; the maximum for an oral test is 1.5 hours. Deviation from this rule is possible in the case of students with a functional impairment, in line with Article 7.1 of the general section of the EER.
2. Written tests are assessed on the basis of pre-defined standards for the various assignments or partial assignments of the test. The student is informed of the maximum score for each assignment in a written test by adding this information to the assignment in the test.
3. Oral testing is open to the public. This is subject to the provisions in Article 4.5, paragraphs 2 and 3 of the general section of the EER.
4. The examiner cannot hold an oral test for more than one student at a time, unless agreed otherwise in consultation between the examiner and the students involved. In the case of a project-based course, joint oral testing of a group of students is possible.

Article 5 Order during test sessions

1. For each written test, the examiner responsible will assign one or more invigilators who will ensure that the test can be taken in an orderly fashion.
2. All students who have registered for a particular test are entitled to take the written test.
3. All electronic equipment and applications must be switched off during the test session, with the exception of the use of equipment and applications for which the examiner has given explicit permission.
4. During a test, students must be able to identify themselves upon request by means of a proof of enrolment (student ID).
5. At the start of the test, students must write their name and student number on all test materials.

Article 6 Fraud

1. Fraud is defined as follows:
 - a. The use of more or other materials during a test than those mentioned by the examiner as permitted prior to the start of the test.
 - b. The use of materials or assistance or the offering of materials or assistance during a test of which the student knows (or should have known) that this is not permitted. This includes, among other things:
 - i. Cheating during a test, whether or not:
 - by the use of unauthorised materials, such as: books, notes, electronic devices
 - copying from others or allowing others to copy from you
 - communicating about the test matter with persons other than the supervisors, before handing in the test
 - ii. Forgery.
 - c. Behaviour that the examiner designated as fraud prior to the exam, and for which measures have been indicated that will be taken if such behaviour occurs.
 - d. Plagiarism.
2. The examiner and/or the department must always inform the Examination Board of any possible case of fraud. The Examination Board can, after consulting all parties involved, decide to take suitable measures.
3. If a student or external student has committed fraud, the Examination Board can revoke that person's right to take one or more tests, exams or final examinations to be indicated by the Examination Board, for a period to be defined by the Examination Board, for a maximum of one year. In case of serious fraud, the institutional administration can, by recommendation of the Examination Board, permanently terminate the student's enrolment (WHW Art.7.12b paragraph 2). The student will not receive any assessment for the test in which he or she committed fraud.
4. If a student is allowed to take an exam for the study unit after fraud has been established, the Examination Board can impose the manner of testing of the relevant subject on the student in question.

Article 7 Rules in the event of an emergency

1. The Executive Board, or the building manager on their behalf, establishes whether there is an emergency or imminent emergency.
2. Once this has been established, (a part of) the building is evacuated in compliance with the corresponding rules that are in force.
3. The Examination Board is informed of the emergency mentioned under paragraph 1 by the examiner within one day.
4. If an emergency situation occurs or is considered to be imminent, during or shortly before an exam, the following applies: In case of an imminent emergency situation before the start of an exam, the exam is postponed with immediate effect. In consultation with the Examination Board, the examiner responsible sets a new exam time and date. The new exam time and date must be set within a month of the original date (not including holidays) and is binding.
5. In the event of an emergency or an expected emergency during a test, the following procedure applies:
 - a. The student's name and student number must be stated by students on all test materials (at the beginning of the test).
 - b. Those present must immediately leave the test room, on instruction of the authority in charge or the supervisor.
 - c. All students leave all their test materials in the test room.
6. The Examination Board is responsible for concluding a test that was interrupted or postponed due to an emergency or imminent emergency.

7. The Examination Board may decide that the examiner, if this is reasonably possible, determines the final grade on the basis of the (partially) completed work that was handed in, if the students were able to start work on the test.
8. In the event that the Examination Board, on the grounds of paragraph 7, rules that the examiner cannot determine a final grade, a re-take of the exam interrupted by the emergency situation will be organised for the affected students within a month (excluding holidays) of the emergency situation, provided the aforementioned students had registered for the exam in question.

Article 8 Determination and publication of the exam results

1. Only the exam result is included in the programme information system. If an exam consists of more than one test, the examiner saves the test results in his/her own administration. The students will be informed of their results by the examiner, observing the students' privacy.
2. If a study unit is assessed by more than one examiner, the responsible examiner makes sure that all of the examiners use the same standards for assessment.
3. If the assessment of a written exam results in a (not rounded) grade ≥ 4.5 and < 5.5 , the student may request to have the work assessed by a second examiner. If, after consultation between the two examiners, the assessments still differ, the grade will be the average of the two assessments.

Article 9 Flexible programme

Contrary to the provisions in Article 5 of the programme-specific appendix, a student is allowed to take the Bachelor's final examination on the basis of a set of examination components proposed by the student (also known as a Bachelor's flexible programme, in line with WHW article 7.3h), provided this set of components has been approved by the Examination Board.

- A. The following minimum requirements apply for students from the 2013/2014 cohort and later:
 - a. The programme must consist of at least 180 EC.
 - b. The programme includes at least 6 of the 8 compulsory modules from the B1 and B2 phases.
 - c. The programme includes a final Bachelor's assignment with a nominal study load of no less than 15 EC.
- B. The following minimum requirements apply for students from the 2012/2013 cohort and earlier: The programme for the B2 and B3 years must consist of at least 120 EC.
 - a. The programme includes at least 70% of the compulsory study units.
 - b. The programme includes a final Bachelor's assignment with a nominal study load of no less than 15 EC.

The Examination Board will check that the programme is appropriate and consistent within the domain of the programme and that the level is high enough in light of the intended learning outcomes of the programme.

Article 10 Resits and exemption

1. For resits the rules as stated in the assessment plan of the module in question apply.
2. The examiner of a project can decide to offer additional assignments for certain project components.
3. The Examination Board will decide whether any exception to the provisions stated in paragraph 1 must be made for individual students.
4. The Examination Board may grant full or partial exemptions for study units on the basis of competencies acquired elsewhere. To this end, the student must submit a request accompanied by a positive recommendation from the examiner of the study unit in question.
5. An examiner who wants to offer students the option to take an additional test can obtain permission to do so from the Examination Board. The Examination Board has delegated the authority to make a decision on these matters and to find a suitable time in the timetable to the programme director. The programme director must inform the Examination Board of this decision at the next exam meeting.

Article 11 Examination results

1. Students have passed the Bachelor's final examination (WHW art. 7.10 paragraph 2, art 7.12b paragraph 3) when they meet the criteria set for the cohort concerned:
 - A. Students from the 2020/2021 cohort and later have passed the Bachelor's final examination when they meet one of the following criteria a and b:
 - a. all study units in the B1-programme have been completed with a pass grade (≥ 6.0);
 - b. one of the four Math study units in the B1 programme (Calculus 1A; Calculus 1B; Linear algebra; Calculus 2) has been completed with a grade 5.0, and at least one other Math study unit has been

- completed with a grade ≥ 6.5 . All other study units from the B1 programme have been completed with a pass grade (≥ 6.0);
- and they meet both of the following criteria:
- c. all study units of the B2 and B3 programme have been assessed;
 - d. none of the examination components of the B2 and B3 programme have been assessed with a grade lower than 6.0.
- B. Students from the 2019/2020 cohort have passed the Bachelor's final examination when they meet one of the following criteria a and b:
- a. all module parts in the B1-programme have been completed with a pass grade (≥ 5.5);
 - b. one of the four Math module parts in the B1 programme (Calculus 1A; Calculus 1B; Linear algebra; Calculus 2) has been completed within the range 5.0-5.4, and at least one other Math module part has been completed with a grade ≥ 6.5 . All other module parts from the B1 programme have been completed with a pass grade (≥ 5.5);
- and they meet both of the following criteria:
- c. all examination components of the B2 and B3 programme have been assessed;
 - d. none of the examination components of the B2 and B3 programme have been assessed with a grade lower than 6.
- C. Students from the 2013/2014 cohort and later, and students from earlier cohorts who have been transferred to the 2013/2014 programme (or later) have passed the Bachelor's final examination when they meet both of the following criteria:
- a. all examination components of the programme have been assessed;
 - b. none of these examination components have been assessed with a grade lower than 6.
- D. Students from the 2012/2013 cohort and students from earlier cohorts who have not been transferred to the 2013/2014 programme (or later) have passed the Bachelor's final examination when they meet both of the following criteria a and b:
- a. the student has passed the first-year examination or has completed all examination components, adding up to 60 EC, in the B1 phase, meeting one of the following criteria¹:
 - i. all examination components mentioned to belong to groups A, B, C, and D in article 4 of the 1 September 2012 version of the "Opleidings specifieke bijlage van het opleidingsdeel van het studentenstatuut inclusief de onderwijs- en examenregeling van de bacheloropleiding Scheikundige Technologie" have been completed with a pass grade;
 - ii. no more than one of the exam components has been completed with a 5. No other exam components have been completed with a fail grade, and the average grade of all exam components is higher than 6.0;
 - iii. no more than 2 exam components have been completed with a 5 (a fail grade), which do not belong to the same group, and with the average grade in group A and group B being 6.0 or higher.
 - b. The student has completed all examination components, adding up to 120 EC, in the B2 and B3 phase, meeting the following criteria:
 - i. all examination components in the B2 and B3 phase have been assessed;
 - ii. none of the examination components in the B2 and B3 phase have been awarded a grade lower than 5;
 - iii. the final Bachelor's assignment, or a final internship, was awarded a grade ≥ 6 ;
 - iv. no more than two examination components in the B2 and B3 phase were awarded with a 5 (fail grade);
2. The Examination Board determines the day on which the exam results for the Bachelor's final examination are dated. As a rule, this is the day that the last study unit is completed.
 3. If so desired, the student can submit a written motivated request to the Examination Board to postpone their decision that the Bachelor's final examination has been passed, and accordingly, to postpone the granting of the degree certificate (WHW art.7.11 paragraph 3, EER art. 5.2 paragraph 3). When making such a request, the student must indicate at least the duration of the delay. If the student has requested delay, the date on which the Examination Board has decided that the student has passed the examination will be considered the examination date.
The student will be informed of the possibility to postpone the date on which it is determined that the student has passed the exam, in the response the student will receive after the 'Bachelor's assignment CSE request' has been processed by the Examination Board.
The request must be submitted no later than six weeks before completing the last² study unit.
 4. The provisions in paragraph 3 of this article also apply to the final examination of a Bachelor's flexible programme, as described in article 9 of these rules.

¹ The set of exam components is recorded in the programme-specific appendix to the OER of Chemical Engineering, dated 1 September 2012.

² Usually, this is the final Bachelor's assignment.

Article 12 Exceptional ability

During the graduation ceremony, the Bachelor's certificate may be issued with the designation 'cum laude'. For this, the Examination Board assesses all results obtained during the Bachelor's programme, using the following minimum conditions for qualifying for the designation 'cum laude':

- a. the grade for the final Bachelor's assignment is 9.0 or higher;
- b. no grades lower than 6.0 are recorded for any study units or module parts in the student information system of the programme;
- c. the not rounded and unweighted average grade of the study units that are part of the Bachelor's curriculum is 8 or higher;
- d. the student has completed his/her bachelor's programme within a maximum of four years.

Article 13 Final Bachelor's assignment procedure

A. The following procedure applies for students from the 2013/2014 cohort and later.

1. The literature study and drafting of the research plan (*preparation for the final Bachelor's assignment*) are part of the eleventh module. During the eleventh module, before the student starts writing the research proposal and conducting the literature study, the student picks an assignment from a research group and submits his or her choice of subject to the Examination Board for approval, using a form ('Final Bachelor's assignment agreement CSE'), which can be downloaded from the website of the Chemical Science & Engineering programme. This application indicates the head supervisor for the project, as well as the day-to-day supervisor.
2. The final Bachelor's assignment covers an entire module. The criteria that students must meet before starting the final Bachelor's assignment are included in article 9 of the programme-specific appendix to the EER of the Chemical Science & Engineering programme. In order to prevent study delays, exceptions may be made. To this end, the student must submit a request to the Examination Board. All successful requests shall include a study plan, containing *Preparation for the Bachelor's assignment*.

Research

3. The student conducts the research in accordance with the research plan. At least one progress meeting with the supervisor and head supervisor must be held during the research period.

Reporting

4. The student carries out a plagiarism scan on the final report by means of plagiarism software made available by the study programme. The student discusses the outcome of the scan with the daily supervisor. On the assessment form of the final assignment, the supervisor indicates that this scan has been performed and that no plagiarism has been detected.
5. The final printed report must be submitted to the final Bachelor's assignment committee by the start of the last week of the module. The final report must include the research plan, as well as a description of the research process, which will be considered when determining the final grade (in the main report or in an appendix).
6. In the last week of the module, all students must give presentations, which are grouped in clusters. These presentations may last about 15 minutes. After each presentation, the students must prepare a 10-minute defence of their work in front of the committee and fellow students. The defence is public.
7. Each presentation will be followed up by a discussion about the grade, for which research process, content, communication, cooperation, and attitude are evaluated. The assessment is finalised on the assessment form ('Assessment form Bachelor's assignment', which can be downloaded from the website of the Chemical Science & Engineering programme).
8. If the final Bachelor's assignment is awarded a 6 or a 9 or higher, the final Bachelor's assignment committee must include a justification of the grade in question on the assessment form.

B. The following procedure applies for students from the 2012/2013 cohort and earlier.

1. At least a month before the start of the 4th quarter, the student chooses an assignment at a research group and submits his or her choice of subject to the Examination Board for approval, using a form ('Final Bachelor's assignment agreement CSE'), which can be downloaded from the website of the Chemical Science & Engineering programme and submitted through 'mobility online'. This application indicates the head supervisor for the project, as well as the day-to-day supervisor.
2. If all criteria have been met, the Examination Board will give the student permission to start his final Bachelor's assignment. These criteria are as follows:
 - The B1 phase has been completed,

- when starting the assignment in the fourth quarter, the following components may still be pending completion: the final Bachelor's assignment, courses taken during the third quarter that have not yet been completed at the time of application, but are scheduled to be completed in the fourth quarter, and no more than one other course;
 - the student may, with the approval of the Examination Board, start the final Bachelor's assignment earlier than indicated in the schedule if they have no further courses to complete; in this case, the student must still participate in the joint final session (in week T+10),
 - the content of the final assignment meets the appropriate standards.
3. The student can choose to take the 'preparations for the final Bachelor's assignment' course in module 11, worth 4 EC. Taking this course means the student need not meet the criteria stated in points 4 through 7.

Literature study

4. The time required to complete the literature study is about 2 weeks. Students are allowed to start the literature study before the start of the quarter in question, which may be necessary to free up time for a resit, for example. The draft version of the literature study must be approved (go/no-go) by the information specialist. Key criteria include: search strategy, the structure of the report, and reference use. Students must schedule an appointment with the information specialist in time.
5. The information specialist's approval is passed on to BOZ. The student is allowed to continue the assignment.

Research plan

6. Drafting the research plan can take up to 1 week. A standard form has been drawn up for the research plan, which is available from the Centre for Educational Support of the Faculty of Science and Technology. The research plan must be approved (go/no-go) by the head supervisor and the delegate. The student must schedule an appointment with the delegate in time.
7. The delegate's approval is passed on to the Centre for Educational Support of the Faculty of Science and Technology. The student is allowed to continue the assignment.

Research

8. The student conducts the research in accordance with the research plan. At least one progress meeting with the supervisor and head supervisor must be held during the research period.

Reporting

9. The final printed report must be submitted to the final Bachelor's assignment committee by the start of the 10th week of the quarter. The final report must include the research plan, as well as a description of the research process, which will be considered when determining the final grade (in the main report or in an appendix).
10. In the last week of the quarter, all students must give presentations, which are grouped in clusters. These presentations may last about 15 minutes. After each presentation, the students must prepare a 10-minute defence of their work in front of the committee and fellow students. The defence is public.
11. Each presentation will be followed up by a discussion about the grade, for which research process, content, communication, cooperation, and attitude are evaluated. The assessment is finalised on the assessment form ('Assessment form Bachelor assignment', which can be downloaded from the website of the Chemical Science & Engineering programme).
12. If the final Bachelor's assignment is awarded a 6 or a 9 or higher, the final Bachelor's assignment committee must include a justification of the grade in question on the assessment form.

Article 15 Final Bachelor's assignment committee

1. A final Bachelor's assignment committee is appointed for the supervision and assessment of the final assignment.
2. The final Bachelor's assignment committee consists of at least three members. The committee must meet the following conditions:
 - a. the chairperson is the delegate of the Examination Board; they will assess the research process and the structure of the literature study, report, and presentation;
 - b. the head supervisor; they are a member of the research group within which the assignment is carried out and they are responsible for content-related aspects;
 - c. the daily supervisor (usually a PhD student); their assessment will mainly emphasize attitude and professionalism.
3. The Bachelor's assignment committee may also contain scientific experts from outside the university or from outside the field of Chemical Science and Engineering.

4. It is possible to carry out the final Bachelor's assignment at another university or research institute if one of the lecturers in the field of Chemical Science and Engineering is prepared to take the role as head supervisor.
5. The composition of the final Bachelor's assignment committee must be approved by the Examination Board.

Article 16 Effectuation

These regulations will come into effect on 1 September 2021 and will replace the regulations dated 29 September 2020.

Established by the Examination Board for Chemical Science and Engineering,

Enschede, 24 August 2021.