

# EDUCATION AND EXAMINATION REGULATIONS FOR CIVIL ENGINEERING

## Introduction

This document is the Students' Charter CE, hereinafter referred to as SC-CE, and consists of the following:

- Study Guide Civil Engineering
- The programme-specific appendix for the bachelor's programme Civil Engineering, consisting of:
  - Programme-specific appendix to the Education and Examination Regulations
  - Rules and Guidelines of the examination board

Rights can be derived from the SC-CE by the faculty as well as by the students who are enrolled for the programme. This does not apply with respect to all other written and electronic publications, such as:

- The information on the website: [www.utwente.nl/ce](http://www.utwente.nl/ce) (except the SC-CE)
- The study catalogue of the UT:  
<http://osiris.utwente.nl/student/OnderwijsCatalogus.do>
- Brochures and manuals

The SC-CE is published on the website of the programme. A printed version will be made available free of charge upon request.

In situations not covered by the SC-CE a decision will be made by the dean or by the examination board, depending on the responsibilities defined by law. The same applies in the event of (alleged) ambiguity, inconsistencies, differences in interpretation and/or (apparently) conflicting texts. The dean or the examination board will inform the involved examiner(s) and/or the student(s) of the decision.

In cases in which strict application of the SC-CE would cause clearly unintended or unreasonable situations, the examination board, the dean or the programme director can deviate from the regulations, provided that this does not have any negative effects for the student. This decision must be motivated in writing and must be communicated to the student, the examination board, the dean, the programme director and Bureau of Educational Affairs (BOZ).

Articles in this regulation refer to this SC-CE. If an article refers to legislation, the reference is to the Higher Education and Research Act, unless stated otherwise.

Reference: A-8787  
Enschede, 31 August 2017.

*Prof. dr. G.P.M.R. Dewulf*  
Dean of the Faculty of Engineering Technology

# TABLE OF CONTENTS

<b>STUDY GUIDE CIVIL ENGINEERING .....</b>	<b>4</b>
Practical Information.....	4
Programme organization.....	4
Programme committee (OLC).....	4
Facilities .....	4
Timetables .....	5
Education Systems.....	5
Quality Assurance .....	5
Student Counselling .....	6
Practical Realization of Counselling.....	6
Complaints .....	6
<b>PROGRAMME-SPECIFIC APPENDIX TO THE EDUCATION AND EXAMINATION REGULATIONS FOR THE CIVIL ENGINEERING BACHELOR'S PROGRAMME .....</b>	<b>7</b>
<b>a.</b> Content of the programme and the associated examination .....	<b>7</b>
Objectives of the programme .....	7
Teaching methods .....	7
Examinations .....	7
<b>b.</b> Content of the specializations .....	<b>9</b>
<b>c.</b> Attainments goals of the programme .....	<b>10</b>
<b>d.</b> Organization of practical exercises .....	<b>11</b>
<b>e.</b> Study burden of the programme and each of its component of the study programmes .....	<b>11</b>
<b>f.</b> Detailed rules art. 7.9, fifth section of the WHW .....	<b>11</b>
<b>g.</b> Master programmes .....	<b>11</b>
<b>h.</b> Number and order of the tests and practical exercises.....	<b>12</b>
<b>i.</b> Organization of the programme .....	<b>12</b>
<b>j.</b> Periods + test frequency .....	<b>12</b>
<b>k.</b> Period of validity of passed examinations.....	<b>12</b>
<b>l.</b> Manner of testing .....	<b>12</b>
<b>m.</b> Order requirements.....	<b>12</b>
<b>n.</b> Requirements for the composition of the profiling track (minor) .....	<b>12</b>
<b>o.</b> Transition regulations.....	<b>13</b>
<b>p.</b> Language .....	<b>15</b>
<b>q.</b> Further definition of terms for Civil Engineering.....	<b>15</b>
<b>RULES AND GUIDELINES OF THE CIVIL ENGINEERING EXAMINATION BOARD .....</b>	<b>17</b>
<b>APPENDIX RB1 .....</b>	<b>26</b>
<b>APPENDIX RB2 .....</b>	<b>27</b>

# STUDY GUIDE CIVIL ENGINEERING

## Practical Information

### **Programme organization**

Dean of the faculty	<i>Prof. dr. G.P.M.R. Dewulf</i>
Programme director	<i>Dr. ir. C.M. Dohmen-Janssen</i>
Programme coordinator	<i>Ir. S. Siebelink</i>
Study adviser	<i>Ir. J. Roos - Krabbenbos</i>
Bureau of Educational Affairs (BOZ)	<a href="mailto:BOZ-CE-CES@utwente.nl">BOZ-CE-CES@utwente.nl</a>

### **Programme committee (OLC)**

The programme committee (OLC) is responsible for monitoring and approving the content and the quality of the Civil Engineering programmes. Employees, scientific staff and the students are equally represented in the programme committee.

Chair: *Prof. dr. ing. K.T. Geurs*

Bureau of Educational Affairs (BOZ) is the secretariat of the programme committee.

### **Study Association**

Concept ([www.concept.utwente.nl](http://www.concept.utwente.nl))

## Facilities

1. For all communications in connection with the programme as well as all administrative procedures internet or intranet will be used. The University of Twente uses an electronic learning environment. In the organization of the bachelor CE programme the assumption is that students are in possession of a laptop. Engineering Technology students can use the offer of the Notebook Service centre (NSC) for this purpose. Via their laptop, students can use the network of the university, which provides access to the internet and intranet.
2. Use of computer and network facilities for other purposes than study may be regarded as misuse.
3. When they first enrol with the University of Twente, each student will be provided with an individual student email account.
4. The programme Civil Engineering employs a site on the electronic learning environment. All electronic communications by the programme will be executed via this site. All students are requested to enrol for this programme site from the start of their study.
5. The university has lecture rooms and tutorial rooms, accommodations for guided and independent self-study, a library, and research facilities for educational purposes. The university offers limited facilities for free computer access.
6. The programme will provide accommodation to the study association for their activities.
7. Misuse of or damage to facilities of the University of Twente, or misconduct can, in addition to leading to claims for compensation, lead to a decision by the dean to temporarily exclude the student from participation in the programme, tests, exams and examinations.

8. Books and journals relevant to B-CE can be found in the Central Library of the UT. Regulations concerning the quantity of books on loan, the lending period and fines are determined by the University Library.
9. If excursions, work visits, field work, etc. are a part of the programme (either compulsory or optional) that students are expected to take part in, the maximum contribution to the costs per student per excursion will be 10 euro, for a maximum of 4 excursions per year. Any costs exceeding this will be for the account of the university. If the above activities take more than one day, the programme will take care of proper accommodation.

## Timetables

Within reason, the parts of the programme will be spread evenly over the year, ensuring that the study load (including assignments, projects, practical exercises, etc.) is spread evenly over the weeks of the programme.

The timetable for each year consists of two semesters or four quarters. The last two weeks of each quarter are usually reserved for exams/resits and/or finishing assignments and/or projects. The teaching of some subjects in year B3 covers two quarters. The study load of these subjects is distributed over an entire semester.

## Education Systems

- The University of Twente uses an electronic learning environment (BlackBoard, <http://blackboard.utwente.nl>). In principle, Blackboard contains detailed information for each subject and the related assignments, etc.
- The University of Twente uses an electronic student information system (Osiris, <http://osiris.utwente.nl/student>). Osiris contains information about the programme and general course information. It is used to enrol for modules (a component of the study programme) and for the registration of grades.

## Quality Assurance

Quality Assurance involves at least the following annual activities:

- Surveys carried out at the end of each quarter  
These surveys may be conducted among the participating students, at the end of each quarter.
- Comprehensive evaluation of a component of the study programme  
Upon the request of the OLC, the programme coordinator performs (or gives instruction for) comprehensive evaluations of components of the study programme.
- Panel discussion  
Panel discussions are held each quarter of every academic year (B1, B2, B3) with students who participated in the programme in that quarter.
- Data on performance and transition  
Every year, the CES (Centre for Educational Support) produces standardized overviews of performance and transition.
- Performance appraisals  
Results of activities stated in the first three items are brought to the attention of chair holders, to allow them to address these issues in their annual performance appraisals with all employees.

- Educational Professionalization  
Members of the scientific staff must have a teaching qualification (Basis Kwalificatie Onderwijs) or given the opportunity to acquire/maintain this qualification.
- Occasional activities  
If necessary, in addition to the activities mentioned above, further assessments are carried out (such as assessment of facilities, how time is spent, exit evaluations, surveys among alumni, etc.)

## Student Counselling

- The study adviser is responsible, among other things, for the coordination and the quality of counselling.
- Each first-year student is assigned a mentor at the start of their bachelor CE programme. The mentor is a staff member of the faculty. In consultation with the study adviser, a student may be assigned another mentor in their first year. The mentor will provide guidance and advice to the student in their first year. After the first year, the mentor periodically discusses study progress with the student, when the results warrant this, but at least twice a year.
- The study adviser gives - solicited or unsolicited - advice to the examination board, to the programme director, to individual lecturers/examiners, and to students in connection with identified bottlenecks in the study load and study progress of individual students or groups of students.

## **Practical Realization of Counselling**

Starting points for counselling of bachelor students:

- Aimed at all students during their entire programme;
- Both reactive and pro-active (focused on career and study progress);
- Pro-active:
  - Information meetings in B1 on B2, in B2 on B3, information on BSc-thesis assignment and the master programmes of Civil Engineering
  - Invitation of first-year students by lecturer/mentor (3 times)
  - Invitation of second-year students by study adviser (1 time)
  - Invitation of students without progress by study adviser
  - Invitation by the study adviser following a report (e.g. by a teacher or by a fellow student)
- The study adviser holds final responsibility for the student counselling within a programme

## Complaints

Complaints about the (organization of the) programme can be sent to the programme director, the programme coordinator, or the study association. Appeals, complaints and objections are possible via the Complaints Desk, located on the second floor of the Vrijhof building.

Complaints about the (organization of) tests, exams and examinations can be sent to the examination board. Appeals against a decision by the examination board are possible via the Complaints Desk on the second floor of the Vrijhof building.

# PROGRAMME-SPECIFIC APPENDIX TO THE EDUCATION AND EXAMINATION REGULATIONS FOR THE CIVIL ENGINEERING BACHELOR'S PROGRAMME

The rules set out in this appendix are part of the programme-specific part of the Students' Charter, including the education and examination regulations, of the Civil Engineering bachelor's programme (B-CE, CROHO number 56952) of the Faculty of Engineering Technology of the University of Twente. Any references in this appendix to the articles in OER2017 refer to the Education and Examination regulations for the Bachelor's Programmes 2017-2018.

## **Appendix a.**      Content of the programme and the associated examination

### **Objectives of the programme**

The programme aims to offer such knowledge, skills and understanding in the area of Civil Engineering, as well as the subareas Business Administration and Public Administration, that graduates are qualified to enter into an independent profession at the bachelor level, and for the master's programme.

### **Teaching methods**

- **Lecture:**  
A plenary meeting for students intended for the transfer of information.
- **Tutorial:**  
A meeting (for a subgroup of the population) intended to enable students to process the subject matter (also known as self-study).
- **Assignment:**  
The execution of a design or research assignment.
- **Practical:**  
A practical training in the sense of art. 7.13, section 2 item d of the law. This concerns the participation in an educational activity aimed at the acquisition of skills, such as making an assignment or a test design, carrying out tests and experiments, and taking part in field work or an excursion.
- **Project:**  
Executing a design or research assignment as a team.

### **Examinations**

The B-CE programme has one examination: the final bachelor examination.

The Civil Engineering programme consists of the following components:

1. The core programme, consisting of 8 modules
2. The differentiation programme, consisting of:
  - o Two optional modules
  - o A graduation semester (modules 11 and 12)

The following abbreviations are used in the tables:

W	=	written test
O	=	oral test
PT	=	project test
T	=	partial test(s)
GA	=	group assignment and/or oral presentation
IA	=	individual assignment and/or oral presentation

### B1

Code	Module	EC	Language	Completion	Quarter
201600092	[1] Introduction to Civil Engineering	15	English	W, PT, T, GA,	1.1
201500177	[2] Water Management	15	English	W, PT, T, GA,	1.2
201300145	[3] Traffic and Transport	15	English	W, PT, T, GA, IA	1.3
201600320	[4] Design of Constructions	15	English	W, PT, T, GA, IA,	1.4

### B2

Code	Module	EC	Language	Completion	Quarter
201400144	[5] Veiligheid en Risico's in Delta's (Safety and Risks in Deltas)	15	Dutch	W, PT, T, GA, IA	2.1
201400145	[6] Sustainable Civil Engineering	15	English	PT, GA, IA	2.2
201600251	[7] Gebiedsontwikkeling (Area Development)	15	Dutch	W, PT, T, GA, IA	2.3
201400147	[8] Modelling and Analysis of Stochastic Processes	15	English	W, PT, T, GA, IA, O	2.4

### B3

Code	Subject	EC	Language	Completion	Quarter
Misc.	Minor module (CE offers the minor Smart Cities – Multifunctional Flood Defences)	15		Misc.	Misc. 3.1
Misc.	Minor module, such as (CE offers the minor Smart Ways to Get Smart Cities Smarter)	15		Misc.	Misc. 3.2
201500311	Preparation BSc-thesis Civil Engineering	15	English	GA, IA, W	3.3
201500312	BSc-thesis Civil Engineering	15	English / Dutch	IA	3.4

The module descriptions, as referred to in art. 4.4 section 1 of the OER2017, can be found in the Osiris catalogue: <https://osiris.utwente.nl/student/OnderwijsCatalogus.do>

### Coherence of module elements

In addition to OER 2017, art. 4.4 section 2b and 2c:

Each module is regarded as a coherent set of module elements, except for the elements that are part of the UT-Mathematics learning line (see table below).

The overview of coherent and separate module parts is as follows:

Module	Coherent part	Separate part
Module 1	All module elements, except for the separate part (11EC)	Mathematics A+B1 (4EC)
Module 2	All module elements, except for the separate part (12EC)	Mathematics B2 (3EC)
Module 3	All module elements, except for the separate part (12EC)	Mathematics C1 (3EC)
Module 4	All module elements, except for the separate part (12EC)	Mathematics D1 (3EC)
Module 5	All module elements, except for the separate part (13EC)	Mathematics D2 (2EC)
Module 6	All module elements (15EC)	
Module 7	All module elements (15EC)	
Module 8	All module elements (15EC)	
Module 9	All module elements (15EC)	
Module 10	All module elements (15EC)	
Module 11	All module elements (15EC)	
Module 12	Not applicable	

### Validity of module results in cases of not passing the whole module

Test results are only valid in the academic year in which they are achieved. The validity of test results is extended with a period of two years in the following cases:

1. When a student has passed the coherent module part, meaning that the weighted average grade of the coherent part is at least 5.5 and that the grade of at most one module element is between 5 and 5.5, not being the project, and that the grades of all the other module elements is at least 5.5.
2. When a student has passed the separate module part, meaning that its average is at least 5.5.

For individual exceptions, see R5.10.

With respect to the regulation for failing or passing a module, see R8.1. Note that the corresponding credits of a module (15EC) are only assigned for passing the whole module (OER2017, art. 4.1 section 8). Also note that credits of the coherent module part and the separate module part both count regarding the binding recommendation for continuation of studies (BSA) in B1 (OER2017, art 6.3 section 7).

## Appendix b. Content of the specializations

The differentiation programme of the B-CE programme consists of a minor of 30 EC and the bachelor thesis.

## Appendix c. Attainments goals of the programme

<b>3TU Academic Criteria (Meijers' Criteria)</b>	<b>Description of the Learning Outcomes BSc programmes CE and CE-NLDA</b>
1) Competent in one or more scientific disciplines	<p>a) The graduate understands the knowledge base of Civil Engineering<sup>*)</sup> and of Technical Process Management in the field of Civil Engineering (i.e. the part of Business Administration and Public Administration relevant for Civil Engineering), is able to apply this knowledge, and is able to maintain and expand his or her knowledge in the field of Civil Engineering and Management</p> <p><sup>*)</sup> particularly in the following subfields:</p> <ul style="list-style-type: none"> <li>- Building and Infrastructure;</li> <li>- Traffic and Transport systems;</li> <li>- Hydraulics of natural water systems.</li> </ul> <p>This includes the required knowledge of related fields, such as Mathematics and Physics.</p> <p>b) The graduate is able to combine knowledge from Business and/or Public Administration with technical knowledge and apply this in an integral way within civil engineering systems, projects or processes of limited complexity.</p>
2) Competent in doing research	<p>a) The graduate is able to identify knowledge gaps within a subfield of Civil Engineering and Management.</p> <p>b) The graduate is able to formulate research problems and is able to produce and carry out a research plan (under supervision), by applying an appropriate methodology, analysing and discussing the results and drawing conclusions from the results.</p> <p>c) The graduate understands the potential benefits of research.</p> <p>d) The graduate is able to assess research within a subfield of Civil Engineering and Management on its usefulness.</p>
3) Competent in designing	<p>a. The graduate is able to:</p> <ul style="list-style-type: none"> <li>- Create a functional design of civil engineering constructions of limited complexity;</li> <li>- Design management processes with limited complexity in the field of Civil Engineering.</li> </ul> <p>This means that:</p> <p>b. The graduate has synthetic skills with respect to design projects.</p> <p>c. The graduate is application-oriented towards the Civil Engineering field when designing.</p> <p>d. The graduate is able to find a balance between possible solutions of requirements, technical possibilities and genuine interests of the parties involved.</p>
4) A scientific approach	<p>a) The graduate has the habit of reflecting upon his or her own work and continuously uses relevant information to improve his or her capabilities.</p> <p>b) The graduate has the attitude of encouraging his or her personal development and improving his or her expertise.</p> <p>c) The graduate makes decisions based on facts, quantified information and solid arguments and is able to evaluate these decisions.</p> <p>d) The graduate is able to judge if available tools and techniques suffice for the problem at hand, is able to apply the proper tools and techniques and is able to contribute to the development of new tools, theories and techniques if these are not available.</p> <p>e) The graduate is able to develop a model to describe/schematize parts of reality of limited complexity, i.e. the graduate is able to describe civil engineering processes and objects qualitatively (in terms of basic principles) and, where necessary and possible, is able to quantify this description in terms of mathematical relationships.</p> <p>f) The graduate knows that models only approximate reality and is able to use them appropriately whenever this is beneficial.</p> <p>g) The graduate's scientific attitude is not restricted to the boundaries of Civil Engineering and Management.</p>
5) Basic intellectual skills	<p>a) The graduate is able to work independently on assignments / projects of limited complexity.</p> <p>b) The graduate is able to work systematically and methodically.</p> <p>c) The graduate is able to analyse problems and information thoroughly and systematically, is aware of analogies between problems and is able to determine connections between different aspects of problems or information of limited complexity.</p> <p>d) The graduate is competent in numeracy and is aware of orders of magnitudes.</p>

	e) The graduate is able to reflect on issues in the different subfields of Civil Engineering and Management.
6) Competent in cooperating and communicating	<p>a) The graduate is able to work effectively in a multidisciplinary environment, can act in different roles depending on the situation, and can take responsibility as a team member.</p> <p>b) The graduate knows the importance of oral and written communication, and can make effective use of them, which means that:</p> <ul style="list-style-type: none"> <li>i. The graduate is capable of collecting and selecting relevant information.</li> <li>ii. The graduate is skilled in properly documenting and presenting results of his or her work, including the underlying knowledge, choices and considerations, to colleagues and to a broader public.</li> <li>iii. The graduate is competent in reasoning.</li> <li>iv. The graduate adheres to existing academic conventions, such as giving proper credit and referencing.</li> </ul>
7) Takes account of the temporal and societal context	<p>a) The graduate is able to position the field of Civil Engineering in its societal context.</p> <p>b) The graduate is able to form an opinion or judgement and contribute to discussions about matters related to Civil Engineering and Management.</p> <p>c) The graduate knows that compromises are unavoidable and is able to deal with them.</p> <p>d) The graduate is aware of the disadvantages for society of certain decisions.</p>

## **Appendix d. Organization of practical exercises**

Each component of the study programme (module) in B1 and B2 of the Civil Engineering programme consists of a practical exercise in the form of a project that is an integral part of the component of the study programme. The second semester of B3 of the Civil Engineering programme also includes a number of practical exercises in the form of (individual and group) assignments. In addition, other practical exercises may be part of components throughout the entire programme. More information on these practical exercises can be found in the descriptions of the components of the study programme.

Practical exercises or projects can, generally, only be done once per academic year.

## **Appendix e. Study load of the programme and each of its components**

1. The study load of the Civil Engineering programme is 180 EC.
2. Of which:
  - a. 120 EC for the core programme
  - b. 30 EC for the minor (optional modules)
  - c. 30 EC for the graduation semester

## **Appendix f. Detailed rules art. 7.9, fifth section of the WHW**

NA

## **Appendix g. Master programmes**

The Civil Engineering bachelor's programme gives direct access to the master's programmes Civil Engineering and Management, and Construction Management and Engineering of the University of Twente. For the admission rules for these master's programmes, see the Education and Examinations Regulations CEM and CME.

Students can consult the following website for more information on alignment with other master's programmes: [www.doorstroommatrix.nl](http://www.doorstroommatrix.nl) and/or contact the study adviser or Student Counselling.

## **Appendix h. Number and order of the tests and practical exercises**

For the number and order of tests and practical exercises see the test schedule of the module, which is published on the Blackboard site of that module (OER2017 article 4.4).

## **Appendix i. Organization of the programme**

The programme is a full-time programme.

## **Appendix j. Periods + test frequency**

See programme-specific appendix A.

## **Appendix k. Period of validity of passed examinations**

See OER2017 article 4.7

The guiding principle for the examination board is extending the validity of passed exams.

## **Appendix l. Manner of testing**

See programme-specific appendix A.

## **Appendix m. Order requirements**

1. Conditions for taking specific parts of the final examination of the Civil Engineering programme:
  - a. Participation in a minor is only allowed if the student has completed a minimum of 3 modules from B1 and a minimum of 3 modules from B2.
  - b. Participation in the graduation semester (modules 11 and 12) is only allowed if the student has fully completed modules 1-8 (years B1 and B2).
2. The examination board may decide, in consultation with the study adviser, that students of cohort 2012 and earlier must be transferred to the TOM examination system.
3. For students of cohort 2012 and earlier, the programme no longer offers any possibilities to complete subjects of B1 and B2 of the examination programme applicable at that time. These students can only take full modules as replacement of pre-TOM subjects (see appendix O).
4. Students of cohort 2012 and earlier have the right to request to be transferred to the TOM examination system.
5. For information on applying for exemptions, see R12 of the Civil Engineering examination regulations.

## **Appendix n. Requirements for the composition of the profiling track (minor)**

1. In the first semester of B3 (modules 9 and 10), students can use minors for the realization of their profiling track. Students can choose (a combination of):
  - a. High Tech Human Touch minor (HTHT minors)
  - b. Educative minor
  - c. Board minor
  - d. Study abroad
  - e. Join-in minor
  - f. In-depth minor

2. In addition to the admission rules on the website (<http://www.utwente.nl/onderwijs/keuzeruimte/minor/>), the examination board has ruled that some minors cannot be used in the profiling track, or can only be used subject to specific conditions. These minors are listed in the table below.

Minor	Restriction
Crossing borders	Not allowed in combination with the study trip Civil Engineering
Board minor	Only accessible after approval by the examination board

3. Study abroad  
Students can, in consultation with and after approval of the study adviser, go for an exchange semester at one of the partner universities. A list of partner universities can be found on the website: <https://www.utwente.nl/en/et/student-mobility/partners/>  
An exchange minor may contain foreign language courses up to a maximum of 5 EC. For more information on the procedure for an exchange minor, see <https://www.utwente.nl/en/et/student-mobility/outgoing/exchange-procedure/>
4. Free minor  
Instead of attending modules at the UT, the student can include another minor in their program, consisting of components offered outside the University of Twente. In that case the written approval of the examination board is required. Such free minors must meet the following criteria:
- Contains (almost) no parts that are also part of the CE core programme or of packages (to be) selected by the student;
  - Each 15 EC constitute a coherent whole at average post-foundation (post B1) level.

## Appendix o. Transition regulations

### a. Replacement Table Subjects B1 (education programme 2012-2013)

Old subject	Module Number (entire module as a replacement)
192211111 Inleiding Civiele Techniek (3 EC)	Module 1
192240121 Water (6 EC)	Module 2
192260731 Civiel. Materiaalkunde (3 EC)	Module 1
191512120 Wiskunde A (5 EC)	Module 2
192243101 Ontwerpproject Water (3 EC)	Module 2
192220111 Verkeer (6 EC)	Module 3
191512170 Wiskunde B (4 EC)	Module 3
192260111 Bouwen (4 EC)	Module 4
192223101	Module 3

Ontwerpproject Verkeer (3 EC)	
191749012 Beleidsprocessen (3 EC)	Module 2
192260142 Mechanica 1 (5 EC)	Module 1
191738003 Algemene Economie (4 EC)	Module 7
192263101 Ontwerpproject Bouwen (3 EC)	Module 4
192264001 Projectmanagement (3 EC)	Module 4
192260152 Mechanica 2 (4 EC)	Module 4
191682350 Communicatiepracticum (1 EC)	Module 2

c. Replacement Table subjects B2

<b>Old subject</b>	<b>Module Number (entire module as a replacement)</b>
191512220 Wiskunde C (4 EC)	Module 5
192260161 Mechanica 3 (4 EC)	Module 6
201000071 Privaatrecht voor CiT (3 EC)	Module 7
194110021 Finance & Accounting (4 EC)	Module 5 of TBK
194110140 Cost Management & Engineering (3EC)	CME for ME (5 EC)
192240211 Stroming (6 EC)	Module 5
192265651 Grondmechanica (3 EC)	Module 5
201000070 Bestuursrecht voor CiT (3 EC)	Module 7
192260181 Civieltechnisch Ontwerpproject (6 EC)	Module 6
192220121 Vervoerswetenschappen (6 EC)	Module 8
192245302 Civieltechnische Milieukunde (4 EC)	Module 6
192211500 Kwantitatieve Basis voor Beleid (4 EC)	Module 7
192240131 Inleiding Waterbeheer (6 EC)	Module 5
194115070 Management en organisatie voor CiT (4 EC)	Module 2 of TBK

d. Replacement Table subjects B3

<b>Old subject</b>	<b>Module Number (entire module as a replacement)</b>
Minor	Elective 30 EC

192212321 IMOD (4 EC)	Module 8
192260101 Ontwerpbenaderingen (3 EC)	Module 11
192477000 Schrijven van een onderzoeksplan (4 EC)	Module 11
194111140 CiT in NL (5 EC)	Module 11
191616060 Ethiek (5 EC)	Module 11
192211351 Ontwerpproject B3 (8 EC)	Design Project Urban development [premaster]
192284108 B-opdracht (16 EC)	Module 11 and 12

2. If the total volume of the subjects to be replaced exceeds the total volume of the replacement parts, an additional subject/assignment may be selected in consultation with the study adviser. In these cases an individual programme will be established.
3. Students cannot use the same TOM subject more than once as a replacement for old subjects. In these cases an individual programme will be established.
4. A student's individual bachelor programme should comprise a study load that is at least 180 ECs.

## **Appendix p. Language**

In addition to OER2017 art. 3.3, the following applies:

1. As of academic year 2017-2018 the language of instruction for B1 is English. For B2 and B3 the language of instruction is Dutch and/or English. See appendix A for the language of instruction per module.
2. If another language than Dutch is used, that language will be English, unless explicitly stated otherwise.
3. In B2 and B3 a number of programme parts are given in English, in order to prepare the students for English education in the master's programmes of the University of Twente. This applies to part of module 6, module 8 and to module 11. In addition, the development or adaptation of module components may anticipate the transition to an English-language CE bachelor's programme from academic year 2017-2018 onwards.
4. Modules 11 and 12 have been developed in English in connection with the internationalization policy objectives of the UT.
5. If English is the language of instruction for a compulsory component of the study programme in B2 and B3, students may request the examination board for an alternative way to take the examination, in conformity with OER2017 article 7 (disability).

## **Appendix q. Further definition of terms for Civil Engineering**

BOZ-CE

CE:

Bureau of Educational Affairs Civil Engineering

Civil Engineering group of the Faculty of Engineering Technology

ELO:	The electronic learning environment website that supports the programme for a specific examination or subject (generally Blackboard)
Faculty:	The Faculty of Engineering Technology of the University of Twente
Mentor/Tutor:	A member of staff responsible for the guidance of first-year bachelor students.
Minor:	A part of the bachelor programme that consists of 30 EC of elective space.
Programme director:	The programme director of the CE programme.
TOM	Twente Educational Model
Website:	The website <a href="http://www.utwente.nl/ce">www.utwente.nl/ce</a>

# **RULES AND GUIDELINES OF THE CIVIL ENGINEERING EXAMINATION BOARD**

Rules of conduct and rules applicable to the exams and examinations of the examination board for Civil Engineering, as recommended by the deans of the faculties.

## **R1 The examination board**

- R1.1 The composition of the board can be found in appendix RB2.
- R1.2 The responsibilities of the examination board of a programme apply to all components that are part of the student's programme.
- R1.3 The examination board consists of at least three members, including two professors.
- R1.4 The executive board of the examination board consists of the president and the secretary of the examination board.
- R1.5 The examination board may be assisted by programme staff, e.g. the programme director, the programme coordinator, the study adviser, and supervisors. These parties attend the meeting in an advisory capacity. The examination board may decide to delegate authorities to the president or the secretary and to delegate the realization to the programme board, in so far as this is not in conflict with legislation or these rules.
- R1.6 The meetings of the examination board and of the executive board of the examination board are not open to the public.
- R1.7 Where it concerns the implementation of the decisions taken by the examination board, the "examination board" refers to the: "executive board of the examination board".
- R1.8 If a member of the examination board is unable to attend a meeting of the examination board, he or she can assign a substitute. The substitute must report as such to the president before the start of the meeting. The substitute has the same voting rights as the member they replace, with the limitation that a substitute has only one vote.
- R1.9 The dean shall appoint a president for a period of two years. The examination board can appoint a vice-president from its midst, who can replace the president at any time.
- R1.10 In cases that concern the examinations or the assessment of parts of examinations not covered by these regulations, a decision will be made by the examination board. In urgent situations a decision will be made by the executive board of the examination board.

## **R2 Authority to hold examinations**

- R2.1 In general, the person who is primarily responsible for the component of the study programme is also primarily responsible for the assessment of the results. The examination board uses the following criteria:
- a. Examinations can be held by permanent or temporary members of staff (lecturer/assistant professor/UD, senior lecturer/associate professor/UHD, professor) of the UT who meet the teaching requirements and who are involved in the programme;
  - b. The authority is limited to the domain in which the staff member is recognized as an expert;
  - c. Staff members of partner universities can also hold examinations, if they meet the stated requirements;
  - d. In all other situations the examination board will decide whether a person is granted the authority to hold examinations. This decision specifies a period of validity and the field of expertise.
- R2.2 For the purpose of holding the exams, the examination board appoints one or more examiners for each part of the examination. If there are multiple examiners for a component of the study programme, responsibility is assigned to one of the examiners.
- R2.3 If the examination board does not explicitly assign another lecturer, the lecturer who is responsible for a component of the study programme is deemed to have been assigned as the examiner.

## **R3 Starting point of the examination board**

- R3.1 All organizational issues in connection with the programme are governed by the nominal programming. The examination rules stimulate study as a cohort, and try to prevent delays that disrupt the order in which the programme is offered.
- R3.2 In particular situations, explicitly defined in the education and examination regulations, the examination board has the authority to deviate from the education and examination regulations.

The examination board will request the advice of the study advisers on decisions that affect individual students. Any information provided by the student shall be treated as confidential. The student's study plan and the known causes of study delay will be taken into consideration.

- R3.3 In such situations, the following applies with respect to section 2:
- a. If a student is regarded as promising, the examination board will consider whether a decision will contribute to completion of the bachelor's programme within four years;
  - b. When the student's education is regarded as being severely delayed, the examination board will consider whether there are sufficient grounds to believe that - on the basis of a study plan and the most recent results - a decision would contribute to preventing further delay.

#### **R4 Organization and form of tests and manner of testing**

- R4.1 Each test is an assessment of the student's knowledge, insight and skills, as well as an evaluation of the results of that assessment.
- R4.2 The questions and tasks of a test will not exceed the programme objectives. These overall learning objectives will be outlined at the beginning of the programme, in preparation of the relevant test. Before the start of teaching for the relevant part of the examination, the final volume and content of the subject matter must be communicated in writing, and written study material for the relevant test must be available to the student.
- R4.3 Before the start of the exam, the examiner submits a copy of the test and standard that will be used to the programme director.
- R4.4 The description in programme-specific appendix A defines the manner of assessment for each component of the study programme. This has been elaborated on in more detail in the test schedule for the component of the study programme (see OER2017 article 4.4 regarding requirements for the test schedule).
- R4.5 The student can ask the examination board for another testing method than the method determined in the first section of this article.
- R4.6 If the evaluation results warrant this, the examination board will review the quality of the test.

#### **R5 Written and oral tests and exams**

- R5.1 A written test has a maximum duration of 3 hours; the maximum for an individual oral test is 1.5 hours. An oral test taken as a group has a maximum duration of 4 hours.
- R5.2 Written tests are assessed on the basis of pre-defined standards for the various tasks or partial tasks of the test.
- R5.3 The student is informed of the maximum score for a task in a written test by adding this information to the task in the test.
- R5.4 If it turns out, when the test is held, that the test cannot be completed within the available time or that questions are ambiguous or too difficult, the examiner will report this immediately to the examination board. The examination board then has the authority to impose an adjusted standard. This new standard must not have an effect that is demonstrably to the detriment of the students.
- R5.5 Oral tests and other parts of the examinations that are not on the academic calendar, are held at a time to be determined jointly by the examiner(s) and the student, and, if the student so wishes, within one month after the end of the teaching for the relevant exam.
- R5.6 In addition to OER2017 art. 4.5,
  - a During an oral test in which more than two students are assessed at the same time, at least two examiners must be present.

- b Oral tests which are held for a series or group of students are not open to the public.
- R5.7 Members of the examination board can at any time attend a test session, or delegate someone else as an observer.
- R5.8 The position of an observer is explained to the participants of the test.
- R5.9 The test schedule indicates the latest date on which the examiner will communicate the results to the students (see OER2017 article 4.7).
- R5.10 In addition to article 4.1.9 of the Education and Examination Regulations for the bachelor's programme:
 

Test results are only valid in the academic year in which they are achieved, except for results of the specified coherent and separate module parts in appendix a. In individual cases, the examination board may extend the validity of test results upon the student's request, provided that the request is submitted no later than 20-07-2018. The decision of the examination board will be based on the student's grades in that academic year.

### **R5a Enrolling for tests**

In addition to OER2017 article 4.3:

- R5a.1 When a student has not enrolled for the programme, but wishes to take part in a test, the student must enrol ultimately on the latest enrolment date for the test. Enrolment is via Osiris, unless Bureau of Educational Affairs (BOZ) has defined another method of enrolment which is announced via the schedule.
- R5a.2 If the student fails to enrol for a test in time, they are no longer entitled to take part in that session. If the student nevertheless shows up for the test, the examiner has the right to refuse to assess the work.
- R5a.3 In situations beyond the student's control, the executive board of the examination board decides whether a student who was unable to enrol for the test in time, will be allowed to take part in the session.

### **R6 Order during tests**

- R6.1 For each test session, the examiner assigns one or more examination supervisors who will ensure that the test session takes place in an orderly fashion. Student assistants cannot act as supervisor. BOZ will draw up a schedule of who will be supervising at the various tests.
- R6.2 If the responsible examiner cannot be present in the room during a test, he or she - or another specialist who can take on the role of examiner - must be reachable for the duration of the test.
- R6.3 During a test, students must be able to identify themselves upon request by means of a proof of enrolment (student ID card).
  - a Students who are entitled to additional time must be able to show their dyslexia card

- R6.4 Students are deemed to take part in a written test as soon as they receive the test paper.
- R6.5 Students are not allowed to have a mobile phone within reach while taking the test.
- R6.6 The decision whether a student who arrives late is admitted to the test is made by the supervisor. Students will not be admitted 30 minutes after the start of the test.
- R6.7 If a student arrives late, they cannot take part in the test if students have already left the test session.
- R6.8 Students are not allowed to leave the test
  - a without the consent of the supervisor
  - b within the period during which delayed students may still be admitted (section 6).
- R6.9 If a student does not comply with the rules in sections 3 to 5, the examiner or the supervisor can immediately revoke the student's right to participate in the test.
- R6.10 In the case of fraud, the work of the student will not be assessed and the examination board is informed. The examination board can exclude the student from participation in the relevant test for a maximum period of 1 year. In the case of preconceived fraud, the examination board can exclude the student from participation in (any) tests for a maximum period of 1 year. Fraud is defined in the general UT Students' Charter.
- R6.11 Appendix RB1 specifies in further detail which practices during the making of written assignments are regarded as fraud.

**R6a Access to, discussion of, and retention of tests**

- R6a.1 In addition to the provisions of OER2017 article 4.9, the student is entitled to make copies of their assessed work at their own expense.
- R6a.2 With respect to practical reports and assignments the rules for access to the student's own work (see OER2017 article 4.9) apply. The person in charge of the practical or the tutorial group, or the examiner determines:
  - a. Whether the reports can be returned to the relevant students after the term of two years
  - b. Whether copies may be made of the assessed reports.

**R7 Rules in the event of an emergency**

- R7.1 In the event of an emergency or an expected emergency during or immediately before a test, the test is immediately postponed or interrupted. The examiner, in consultation with the programme director, determines the date for a new test and whether and how the work already done will be assessed.

## **R8 Regulation for failing or passing a test, resit and binding recommendation**

- R8.1 In addition to OER 2017 art. 4.1, the examination board uses the following regulation for passing or failing modules:
- a The average of the module is at least 5.5. Additionally, the following applies:
    - i The project is completed with a minimum grade of 5.5
    - ii The score for no more than one module element is between 5.0 and 5.5
    - iii The result for all other module elements is at least 5.5.
  - b The test schedule of the module must meet these conditions.
  - c If the non-rounded grade for the module ends in .5 or higher, the grade is rounded to the next higher full number.
  - d A grade for the module between 0 and 1.49 is rounded to 1.
  - e Test grades and grades for partial tests are rounded to 1 decimal.
  - f If the result for a test is NVD (no pass), the grade for the module is also NVD (no pass).
  - g If a student's grade for a module element is lower than 5.0 and/or the number of failed module elements is higher than 1, the final grade for the module is equal to the lowest grade for the module elements.
- R8.2 Repair options
- a Repair options for parts of a module for which the result of the first attempt was NVD (i.e. a result is missing) are only possible with the permission of the examination board. The board delegates this to the study adviser. If necessary, the study adviser will consult the lecturer, the tutor or the module coordinator.
  - b For each test, multiple actions may be necessary in order to repair. These actions are determined by the examiner.
  - c Depending on the results, the module coordinator decides whether repair options will be allowed, and for which parts. The test schedule clearly shows what this means for the relevant module and when repair is possible.
  - d In the event of repair or addition to an assignment that counts as a test or part of a test, the highest possible grade is a 6. Repair or addition to an assignment is only possible in the academic year in which the component of the study programme is offered.
- R8.3 Hardship clause

- a In the event of personal circumstances/force majeure, the examination board will decide if and how the student can resit the test and whether the test results will be retained.

R8.4 In addition to OER 2017 art. 6.3 section 7, the examination board uses the following additional requirements for the binding recommendation in B1: In the B1 phase of the programme, the student must

- a score a 5.5 or higher for at least 3 of the 4 mathematics elements, and
- b a 5.5 or higher for at least 1 of the 2 mechanics elements.

R8.5 If (part of) a component of the study programme is assessed by more than one examiner, the responsible examiner/coordinator makes sure that they all use the same standards. The examiner keeps a record of the results of parts of an exam (tests, partial assignments) in their own administration.

## R9 General rules for failing or passing a test

R9.1 Examination grades are normally expressed as a number between 1 and 10, possibly with the addition of one decimal. These grades have the following meaning:

1	Very bad	5	Nearly sufficient	9	Very good
2	Bad	6	Sufficient	10	Excellent
3	Definitely insufficient	7	More than adequate		
4	Insufficient	8	Good		

Exam units may also be graded alphanumerically in the following manner:

<b>C4</b>	Compensated 4	<b>O</b>	Insufficient
<b>C5</b>	Compensated 5	<b>V</b>	Sufficient
<b>NV</b>	No show	<b>VR</b>	Exemption
<b>NVD</b>	No pass	<b>HNTD</b>	Not required <sup>1</sup>

R9.2 Results from other institutions included in the student's exams programme by permission of the examination board will not be translated into the evaluation system of the UT. When a different assessment system was used (i.e. no grade 1-10 as in the table in article R9.1), sufficient results are registered with 'V' and insufficient results with 'O'. The volume of the component of the study programme is converted to EC.

R9.3 The examination board or the examiner determines if the candidate meets all requirements for taking (a part of) the examination. This authority may also be delegated to the study adviser or to BOZ.

<sup>1</sup> This occurs when another subject has been assigned as a replacement for a part of the examination

- R9.4 A student who does not meet the criteria to officially pass the examination can submit a reasoned request to the examination board to establish whether he/she has passed the examination.
- R9.5 The examination board will communicate its decision concerning the requests referred to in R9.4 or in OER2014 article 5.2 section 3 with the reasons for its decision to the student, in writing, no later than two months after receipt of the request.
- R9.6 In the situations mentioned in R9.4 or in OER2014 article 5.2 section 3, the decision by the examination board is made by majority of votes.
- R9.7 If the required majority, as referred to in R9.6, has not been achieved, the student has been rejected.
- R9.8 Decisions as referred to in R9.5 can only be made when all members of the examination board or their substitutes are present.

## **R10 Cum Laude (with distinction)**

- R10.1 The examination board draws up a with distinction scheme for the bachelor's programme.
- R10.2 The scheme comprises the following criteria:
- a. If a student demonstrates exceptional ability during the bachelor examination, the words "Cum Laude" may be included on their degree certificate.
  - b. The following conditions must be met to qualify for this:
    1. The weighted average of the grades for the modules of the bachelor examination, excluding the final grade for module 12, is at least 8.0. Modules for which no assessments in the form of a grade are given or for which the student was exempted are disregarded for this calculation;
    2. The number of exemptions in the sense of OER2017 article 3.4 does not exceed one-third of the volume of the B-CE programme.
    3. The minimum grade for all modules is 7.
    4. The final grade for the BSc-thesis project (module 12) is at least 8;
    5. The bachelor's programme was completed within four years, unless special circumstances, for the assessment of the examination board, justify a longer delay. Special circumstances are, in any case, circumstances recognized as a condition for the granting of graduation support.
    6. The examination board thinks that the student has shown exceptional ability.

When there are special circumstances, the examination board has the right to let the student graduate with distinction if he or she does not fully meet requirements 1 to 5, as defined under R10.2b.

## **R11 Certificates and registration**

- R11.1 In addition to OER2017 art. 5.4, the following applies:

- R11.2 Bureau of Educational Affairs (BOZ) is responsible for the registration of assessments and for the results of examinations and parts of examinations.
- R11.3 Bureau of Educational Affairs (BOZ) registers which certificates have been issued to a candidate. No registered data on the candidate, with the exception of information on the issued certificates, will be provided to other persons than the candidates themselves, except to:
1. The participants in exam meetings;
  2. The members of the examination board;
  3. The student counsellors;
  4. The board of appeal for examinations;
  5. The persons to whom the faculty has entrusted activities relating to applications for financial support from the graduation fund;
  6. The study adviser and mentor(s);
  7. the programme director;
  8. The programme coordinator;
  9. The mobility coordinator;
  10. The Dienst Uitvoering Onderwijs (DUO).

## **R12 Exemptions**

- R12.1 In addition to OER2017 art. 3.4, the examination board can grant an exemption from participation in practical exercises subject to the same conditions as defined in 3.4.1.
- R12.2 A request for exemption from the obligation to take parts of examinations or to participate in practical exercises must be submitted to the examination board via email.
- R12.3 The student will be given the opportunity to be heard before a decision is made whether a request for (partial) exemption is rejected.
- R12.4 The examination board may grant standard exemptions to specific groups of students.
- R12.5 Exemptions are recorded in writing in a decision.

## Appendix RB1

In addition to the information in the Students' Charter, the following further defines the concept of "fraud" in the context of written assignments. Since there are various types of individual assignments and group assignments, further definition of "fraud" is necessary.

In the context of assignments, the following additional rules apply:

### 1. Individual assignments

A single author is responsible for the assignment. This author receives an individual assessment on the basis of the assignment. Unless explicitly defined otherwise by the lecturer in the assignment description, it is not allowed to hand in a jointly drawn up or written assignment as an individual assignment.

### 2. "Individual" group assignments

The members of the group are responsible for parts of the report. The responsibility for each part of the report is clearly indicated. Unless explicitly defined otherwise by the lecturer in the assignment description, it is not allowed to use (parts of) work by other groups or persons.

### 3. "Joint" group assignments

The group as a whole is responsible for the complete content of the report, even though each member of the group has written a particular part of the report. Unless explicitly defined otherwise by the lecturer in the assignment description, it is not allowed to use (parts of) work by other groups or persons. The following applies to a "joint" group assignment:

- The contribution by each member of the group does not need to be indicated;
- Each member of the group is responsible for the prevention of plagiarism and fraud;
- In the event of fraud, the penalty may be applicable to all members of the group.

In the event of plagiarism/fraud the provisions of article R6.10 will apply.

## Appendix RB2

The composition of the examination board for Civil Engineering is as follows:

<i>Prof.dr.ir.</i> J.I.M. Halman,	chair, Construction Management and Engineering department
<i>Ing.</i> K.M. van Zuilekom	secretary, Centre for Transport Studies
<i>Dr.ir.</i> D.C.M. Augustijn,	member, Water Engineering and Management department
<i>Dr.</i> G.A.M. Jeurink,	member, Faculty EEMCS, department Applied Analysis
<i>Prof.dr.ir.</i> E.C. van Berkum,	member, Centre for Transport Studies
<i>Dr.</i> J.T. Voordijk	member, Construction Management and Engineering department, matters concerning the master's programme CME,
<i>Dr. ir.</i> C.M. Dohmen-Janssen	adviser, programme director
<i>Drs.</i> E. Ruijgh	registry

The executive board of the examination board consists of the president and the secretary. The examination board can be reached by e-mail at [examinationboard-ce@utwente.nl](mailto:examinationboard-ce@utwente.nl)