

# **Annual Report Examination Board CE/CEM/CME 2021**

Enschede, 7-3-2022

Composed by the secretary of the examination board of Civil Engineering/ Civil Engineering and Management/ Construction Management and Engineering

# Preamble

The examination board of CE/CEM/CME has used the following principles as guidelines for its annual report:

- The examination board is a by law required organizational entity (WHW 7.12a) appointed by the dean (Guideline For Teaching And Examination Regulations for Bachelor’s Programs 5.1)
- The tasks of the examination board are defined by law (WHW 7.12b) and detailed in the ‘Regels en richtlijnen examencommissie civil engineering’ of the ‘Studentenstatuut Civil Engineering’.
- The examination board is required to write an annual report (WHW 7.12b-5).
- The examination board CE/CEM/CME defines the function of the annual report as a means in a Plan-Do-Check-Act-cycle. With this interpretation the examination board complies to the ‘Quality Assurance Framework for Student Assessment UT, 12 Dec 2016’ (Chapter 3.1 PDCA cycles for Quality Assurance Student Assessment) and the ‘Assessment Policy ET, Nov 2020’.
- The annual report is based on factual and verifiable information, but not traceable to individuals.

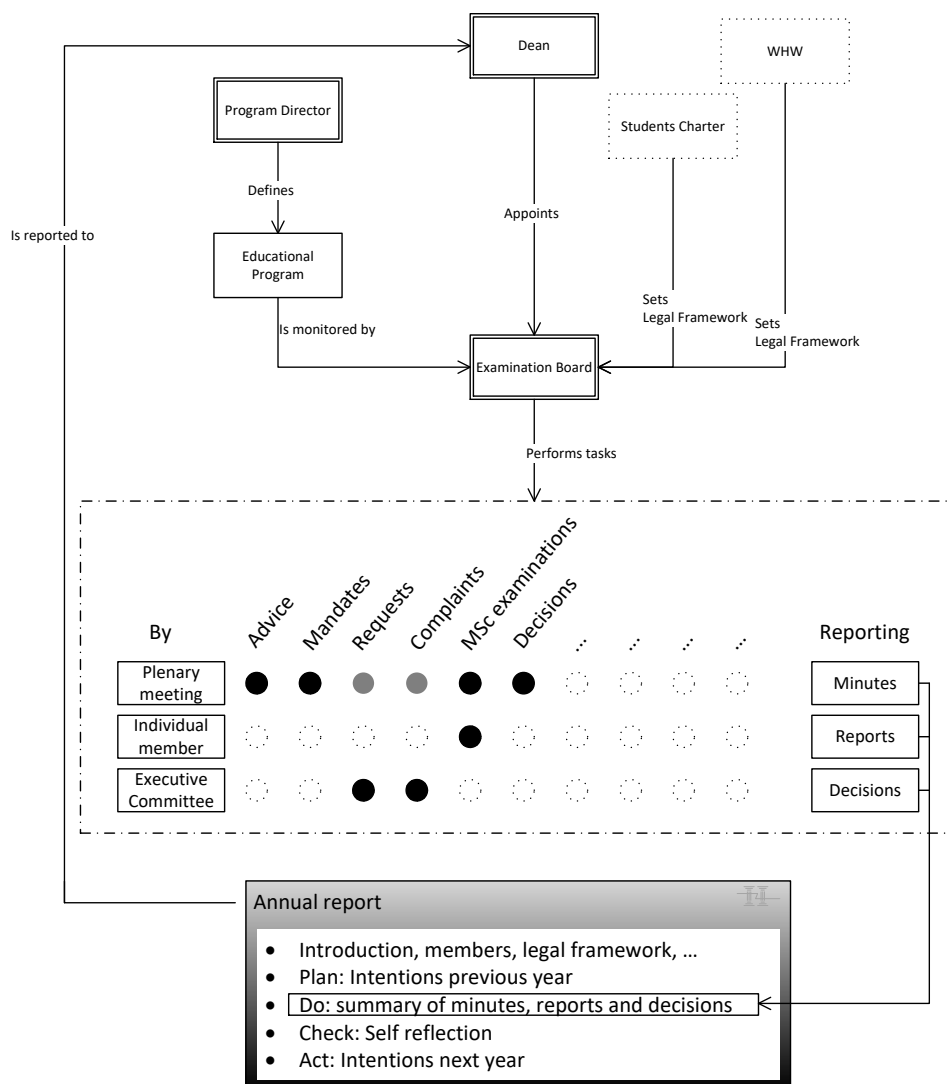


Figure 1 Conceptual model of examination board and the annual report

# 1 The examination board CE/CEM/CME

## 1.1 The members and those involved

The examination board is responsible for the educational programs Civil Engineering (CROHO-number 56952), Civil Engineering and Management (CROHO-number 60026) and Construction Management and Engineering (CROHO- number 60337)

*Tabel 1 The members of the examination board in 2021*

Member	Department	Task and period
prof.dr.ing. K.T. Geurs	Transport Engineering and Management	Chairman 1-10-2020 –
Prof.dr. K.M. Wijnberg	Water Engineering and Management	Vice-chairman 1-10-2020 –
ing. K.M. van Zuilekom	Educational Support ET	Secretary 1-1-2016 –
ir. J.P. Boutkan	Province of Overijssel	External member 13-1-2018 –
dr. J.T. Voordijk	Construction Management and Engineering	1-6-2010 –
dr. M.S. Krol	Water Engineering and Management	1-10-2020 –

The chairman and the secretary form the executive board responsible for daily operation.

The members of the examination board cover the CE Bachelor and Masters CEM and CME. Dr. Voordijk is in particular involved in the Master CME.

Drs. E. Ruijgh is responsible for the minutes of the plenary meetings of the examination board.

## 1.2 Advisors of the examination board

Although the examination board has an independent position and its own responsibility in the educational program it is important that several professionals within the organization have perusal in the discussions and decisions that are taken in the plenary meetings of the examination board. For this reason the following persons received the minutes of the plenary meetings:

- Program Director CE/CEM/CME: dr.ir. D.C.M. Augustijn
- Program Coordinator Bachelor CE/ Program Master Coordinator CEM/CME: M. Hamhuis
- Student Advisor: ir. J. Roos-Krabbenbos

The Program Coordinator is in general present in the plenary meetings.

Depending on the agenda of the examination board the Program Director is present (on own initiative or invited).

For support on educational issues the educationalist E.M. Blokhuis MSc (per 1-7-2020) can be invited.

### 1.3 Mandates

The examination board has the right to delegate well defined tasks to officials. In 2021 one mandate has been added. The pre-master coordinator is mandated to define the study programme in case of deficiency. The complete overview of the mandates is as follows:

- Admittance approval CEM/CME is mandated to the secretary of the admittance committee (M. Hamhuis [from 1-3-2020] for the non-Dutch students and J.G.M. Kemna [from 1-9-2018] for the Dutch students). Whenever necessary the secretary of the admittance committee will consult the examination board. Admittance approval to start the Master program via the pre-master program is mandated to J.G.M. Kemna [from 1-9-2018] on the basis of the pass/fail rules of the pre-master program.
- The Bureau of Educational Affairs is mandated to check the pass conditions for the BSc and MSc certificates whenever these comply to the pass/fail rules and/or jurisprudence of decisions by the examination board. In case of doubt the Bureau of Educational Affairs consults the executive board of the examination board.
- The Bureau of Educational Affairs is mandated to approve the MSc-thesis committee when the committee complies to the rules as set by the examination board (graduation lecturer: at least associate professor; daily supervisor: at least PhD with qualifier). In all other situations the executive board of the examination board will be consulted.
- The student-advisor (ir. J. Roos-Krabbenbos) is mandated to handle the registration of students for examinations.
- The student-advisor (ir. J. Roos-Krabbenbos) is mandated to define students study program in case of illness, activism and top sport. The student-advisor will report the number of involved students for the annual report of the examination board CE/CEM/CME.
- The student-advisor (ir. J. Roos-Krabbenbos) is mandated to handle exceptions to the demands for entering the profiling track (minor). Either the student-advisor or the Bureau of Educational Affairs will report the number of involved students for the annual report of the examination board CE/CEM/CME.
- The student-advisor (ir. J. Roos-Krabbenbos) is mandated to handle composition of the profiling track (minor) as long as these comply to the Students' Charter. In all other situations the executive board of the examination board will be consulted.
- The Track coordinators are mandated to approve the study program within their Master Track.
- Examiners are mandated to set the pass/fail rules for their courses.
- The pre-master coordinator is mandated to define the study programme in case of deficiency.

## 2 The activities of the examination board in 2021

In this chapter we describe the core of the Plan-Do-Check-Act cycle of the examination board. We use the conceptual model of the preamble as a basis where:

- **Plan** stands for the intentions at the start of the year (2.1 Intentions)
- **Do** stands for:
  - results from the plenary meetings (2.2 Meetings by the examination board; 2.3 Decisions; 2.4 Advices)
  - activities by individual members of the examination board (2.5 MSc examination)
  - activities by the executive board (2.6 Requests; 2.7 Other activities)
  - activities by the program as a whole (2.8 BSc and MSc graduations)
- **Check** stands for the self-reflection (2.9 Reflection)
- **Act** sets the intentions for the next year (2.10 Intentions)

### 2.1 Intentions

The annual report of 2020 did mention the following points of attention:

- Developing rubrics for:
  - Proposal BSc-thesis (update)
  - BSc-thesis (new)
  - Preparation CEM MSc-thesis (new)
  - CEM MSc-thesis (major update)
- Test assessment:
  - Revision of the BSc procedure
  - Development of a procedure for the MSc
- Monitoring the consequences of Covid-19.

### 2.2 Meetings by the examination board

The examination board CE/CEM/CME had six plenary meetings in 2021, roughly every six weeks during the academic year: 18-1-2021, 8-3-2021, 19-4-2021, 14-6-2021, 11-10-2021 and 22-11-2021.

A scheduled summer meeting, at 12-7-2021, did not need to take place and was skipped. Usually this meeting is used for decisions related to those students who not fully comply to the binding recommendation on continuation of study (BSA) in the first year of the Bachelor's programme, but due to Covid-19 the binding recommendations were less strict. As a result no decisions were needed.

The executive board of the examination board did meet whenever there was an urgent need. These meetings are not formally documented.

### 2.3 Decisions

38 formal decisions were made during the plenary meetings of the examination board. The majority of the decisions, 26, had to do with the general tasks of the examination board, such as the examination and the educational programme.

Individual requests are in general handled by the executive board unless the complexity or implications require a broader scope. Requests which arrive about a week before the plenary meeting are added to the agenda too, regardless of the nature of the request. Twelve individual requests were handled in the plenary meeting (of a total of 52 individual requests,

see 2.6). The aim was, if possible, to create a general rule in order to streamline the decision process.

*Table 1 Decision by the examination board in 2021*

<b>Count</b>	<b>Nature of the decision</b>
10	General managerial
1	Mandate
11	In relation to the examination in general
4	In relation to the educational programme
12	Requests of individual students
<b>38</b>	

## **2.4 Advices**

In 2021 two advices are given to the Program Director:

- To let the CME MSc-thesis grading have a similar limitation in case of exceeding the lead-time as the CEM MSc-thesis.
- To implement a plagiarism check on BSc- and MSc-thesis.

## **2.5 MSc final assignment examination**

The quality of the MSc final assignment examination is assessed by members of the examination board by following the whole MSc examination as an observer. The observer reads the MSc-thesis in advance and is present during the public (presentation and defence) as well as the non-public part (where the exam committee comes to their final judgment). The selection of a MSc assignment examination is not strictly random, but largely dominated by the available time slots in the agenda of the observer. The observer is allowed to ask questions as a member of the public. In the non-public part of the procedure the observer is not supposed to influence the process of determining the final result and arguments supporting this result. The observer writes a report using a pre-defined format. This report is discussed in the plenary meeting of the examination board and shared with the first responsible examiner. In principle each member of the examination board will attend two MSc examinations per year.

In 2021 the five members of the examination board attended five MSc final assignment examinations. The results of the observations are discussed in the examination board meetings and shared with the graduation lecturer. In general, the procedures and outcomes were in line with the expectations of the observer.

## 2.6 Requests

In 2021 the examination board sent 52 emails to 42 unique students. No mails were relating to employees. For the second year in a row the number of requests was clearly less due to the relaxation of the binding recommendation on continuation of study (BSA) as a result of Covid-19 (table 2).

*Table 2 Development of the Email correspondence 2016-2021*

Year	Emails	Unique students	Employees
2021	52	42	-
2020	51	43	3
2019	128	96	4
2018	119	95	2
2017	147	115	-
2016	164	118	1

In almost all cases an email was a response to a request of a student. Of the 42 unique students a minority of the students (8) received two or more emails from the examination board (table 3).

*Table 3 Number of Emails per individual student in 2021*

Number of Emails to an individual student	Number of students	Number of Emails
1	34	34
2	6	12
3	2	6
4	0	0
Total:	42	52

The majority of these requests were handled by the secretary of the examination board in cooperation with the chair. For those requests where there was no obvious decision possible consultation and information was sought dependent on the nature of the request.

All requests were handled via email. Although there is no formal response time for requests the aim is to avoid long response times and exceeding students deadline (table 4).

*Table 4 Email response percentage for the years 2018 to 2021*

Days	2021	2020	2019	2018
7	30%	36%	19%	58%
14	58%	55%	55%	82%
21	78%	66%	60%	83%
48	98%	91%	91%	90%

The workflow is organised in such a way that requests and decisions are traceable. A basic overview of all requests is available at any time:

- The email request is archived (via an extra copy to the Bureau of Educational Affairs and in the archive of the examination board mailbox).
- Decisions are sent to the requester, cc to the UT email archive (the Bureau of Educational Affairs and JOIN student dossier).
- At any moment an overview of handled requests is available in an Excel worksheet (student information, date received, date answered, reference, subject).

Before the Covid-19 pandemic the majority of the emails were, related to the binding recommendation continuation of study (BSA), sent during the summer holidays. This year, as pervious year the emails were more or less evenly spread over the year (table 5).

*Table 5 Email correspondence per quartile for the years 2019 to 2021*

<b>Quartile</b>	<b>2021</b>	<b>2020</b>	<b>2019<sup>1</sup></b>
1	10	14	12
2	20	14	14
3	10	16	83
4	12	7	19
Total	52	51	128

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<sup>1</sup> Not published in the annual report of 2019, but could be constructed by use of the source data of 2019.



There were 11 cases of fraud or plagiarism reported (table 6). After hearing the student and inspection of the written material the examination board found in 8 of these cases fraud or plagiarism proven (table 7).

One decision is challenged via Board of Appeal for Examinations in 2021. This is not reported in table 6 as this case is not yet finalised in 2021.

Table 6 Email correspondences 2021 by subject.

Description	Frequency
<b>Exemptions and recognition of Earlier Gathered Competences</b>	
Exemption allowed, recognition of Earlier Gathered Competences	3
Exemption rejected, rejection of Earlier Gathered Competences	1
<b>Extra resit and requests for extension of expiration date of results</b>	
Resit for Module study unit allowed	1
Resit for Module study unit rejected	1
Resit (study unit) MSc-course allowed	2
<b>Variations in educational programme</b>	
Individual study program BSc	2
Individual minor BSc	2
Individual study program MSc	4
<b>Exemptions to admittance</b>	
Exemption to entrance requirements allowed	7
Exemption to entrance requirements rejected	3
<b>Other matter</b>	
Double MSc	1
Examination	9
<b>Fraud and Plagiarism</b>	
Fraud or plagiarism proven	8
Fraud or plagiarism not proven	3
<b>Cum Laude</b>	
admittance of Cum Laude	1
<b>Various</b>	
No decision possible or no decision needed	3
Erratum	1
<b>Total</b>	<b>52</b>

Table 7 Proven cases of fraud or plagiarism since 2016.

Year	Proven cases of fraud or plagiarism
2016	9
2017	0
2018	3
2019	4
2020	0
2021	8

## 2.7 Other activities

The influence of Covid-19 on the examination has been a regular topic in the plenary meetings of the examination board. As a result of the UT policy and the national regulations the examination were, as normal, on the Campus. For a specific individual situations examination in a separate room is allowed. Illness and quarantine made extra attempts necessary for individual students.

Handling cross programme issues was one of the topics in the Platform Examination Boards UT meetings. A concrete fraud case of a CE student in a EEMSC course lead to a guideline for process, activities and responsibilities in these kind of cross programme issues. The examination boards EEMSC and CE/CEM/CME will propose this guideline in a Platform Examination Boards UT meeting.

The overview of examiners is enriched with the status of UTQ University Teaching Qualification (UTQ) and Senior University Teaching Qualification (SUTQ).

## 2.8 BSc and MSc graduations

Table 8 The number of graduations per educational program in the year 2021 (2020, 2019, 2018, 2017 and 2016)

<b>Educational Program</b>	<b>Total graduations</b>	<b>of whom with Cum Laude</b>
Bachelor Civil Engineering	57 (57, 55, 50, 55, 53)	3 (2, 3, 3, 3, 0)
Master CEM	46 (62, 51, 45, 46, 65)	5 (3, 6, 3, 5, 8)
Master CME	18 (30, 20, 21, 27, 17)	1 (2, 3, 0, 1, 1)

## 2.9 Reflection

Up till now the short term influence of the Covid-19 pandemic has had limited impacts on the Civil Engineering educational programmes in regards to the results, fraud and plagiarism. However, there might be longer term impacts. The examination board will remain giving attention to Covid-19 issues affecting the quality of the civil engineering educational programmes.

The introduction of TOM 2.0 in 2021, where EC's are gained per study unit instead off the complete module, did have influence on the admittance demands for MOD11 preparation BSc-thesis. Other, perhaps unexpected, effects might occur too. Such as strategic study behaviour of students or systematic changes in number of students with Cum Laude. Critical observation on these developments is needed.

## 2.10 Intentions 2022

The intentions for 2022 are:

- Completion and introduction of the MOD12 BSc-thesis rubric and preparation MSc-thesis rubric.
- Evaluation of the MSc-thesis rubric
- Introduction of test assessment for the master.