## UNIVERSITEIT TWENTE.

# Annual Report Examination Board CE/CEM/CME 2019 

Enschede, 20-04-2020
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' (Chapter 3.1 PDCA cycles for Quality Assurance Student Assessment).
- 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 2019

| Member | Department | Task and period |
| :--- | :--- | :--- |
| prof.dr.ir. A.Y. Hoekstra | Water Engineering and <br> Management | Chairman <br> $1-1-2019-18-11-2019$ |
| ing. K.M. van Zuilekom | Transport Engineering and <br> Management | Secretary <br> $1-1-2016-$ <br> prof.dr.ir. A.G. DoreéConstruction Management <br> \& Engineering |
| dr.ir. M.J. Booij | Vice-chairman <br> $1-1-2019-$ |  |
| Mater Engineering and | $16-7-2018-$ |  |
| Management |  |  |

The chairman and the secretary form the executive committee 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. S.R. Miller and per 1-9-2019 prof.dr.ir. J.I.M. Halman
- Program Coordinator Bachelor CE/ Program Master Coordinator CEM/CME E.M. Blokhuis MSc)
- 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 of ET D. Kuiphuis - Aagten MSc (per 1-1-2019).

### 1.3 Mandates

The examination board has the right to delegate well defined tasks to officials. In 2019 no major changes have taken place. The overview of the mandates is as follows:

- Admittance approval CEM/CME is mandated to the secretary of the admittance committee (E.M. Blokhuis MSc 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 (UT supervisor: 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 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 coordinator is mandated to approve the study program within their Master Track.
- Examiners are mandated to set the pass/fail rules for their courses.


## 2 The activities of the examination board in 2019

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 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 year 2020 (2.10 Intentions)


### 2.1 Intentions

The annual report of 2018 did mention the following points of attention:

- Evaluation of the test assessment
- A redefinition of the assessments forms for the BSc CE, the MSc CEM and the MSc CME thesis


### 2.2 Meetings by the examination board

The examination board CE/CEM/CME had seven plenary meetings in 2019, roughly every two month: 28-1-2019, 11-3-2019, 15-4-2019, 27-5-2019, 15-7-2019, 14-10-2019 and 02-122019.

The July meeting is in particular used for decisions related to those students who not fully comply to the Binding Recommendation in the first year of the Bachelor's programme.

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

### 2.3 Decisions

42 formal decisions were made during the plenary meetings of the examination board.
A larger part of these decisions (25) had to do with individual students. In general a decision for an individual student had to do with the permission to start a course or to participate in an examination. The aim was, if possible, to create a general rule in order to streamline the decision process.

The decisions in regards to the study program in general (14) had to do with extra re-sits for a module component (3), transfer programme MSc (2), the composition of the MSc exam committee (2), refinement of Cum Laude rules for particular situations (2), expiration date of Module components and the test assessment.

A few decisions (3) were related to the examination board itself (tasks and mandates).

### 2.4 Advices

Two advises were given in 2019:

- The module coordinators of MODO2 and MODO5 is advised to detach Matlab from the projects.
- On request of the program committee an advise to avoid 'free riding' in group project is given.


### 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 2019 the five members of the examination board attended four MSc assignment examinations. In general, the procedures and outcomes were in line with the expectations of the observer.

### 2.6 Requests

In 2019 the examination board sent 128 emails to 96 unique students and four employees. This was more or less in line with 2018 (see Table 1).

Table 1 Development of the Email correspondence 2016-2019

| Year | Emails | Unique students | Employees |
| ---: | ---: | ---: | ---: |
| 2019 | 128 | 96 | 4 |
| 2018 | 119 | 95 | 2 |
| 2017 | 147 | 115 | - |
| 2016 | 164 | 118 | 1 |

In almost all cases it was a response to a request of a student. Of the 96 unique students a minority of the students (24) received two or more emails from the examination board (see Table 2). Email to employees (4) were related to Cum Laude and (oral) examinations.

| Number of Emails <br> to an individual <br> student | Number <br> of <br> students | Number <br> of <br> Emails |
| ---: | ---: | ---: |
| 1 | 72 | 72 |
| 2 | 21 | 42 |
| 3 | 2 | 6 |
| 4 | 1 | 4 |
| Total: | 96 | 124 |

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 (see Table 3).

Table 3 Email response time [days]

| Days | \% |
| ---: | :---: |
| 7 | $19 \%$ |
| 14 | $51 \%$ |
| 21 | $60 \%$ |
| 48 | $91 \%$ |

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).

The majority of the emails (73) are sent during the summer holidays (15 in July and 58 in August). Almost all requests in July and August are exemptions in relation to the binding study advice. In general an allowance for an extra resit and/or extension of the expiration date of module component results.

Individual study programs (12) and exemptions to admittance are (7) other main categories.
Four cases of suspicion of fraud were reported by examiners. The examination board judged fraud proven in all these cases.

There was one complaint in regards the difficulty of a re-sit of an exam. The examination board could not find evidence to support this complaint.

The student advisor is mandated to define an individual study program in case of illness, activism and top sport. There were eight occasions where the mandate is used, all in the Bachelor:

- Seven individual study programs due to personal circumstances.
- One individual study programme and regular meetings with the study advisor due to top sport (category 2).

For students in the Master all adjustments were possible within the regular programme.

Table 4 Email correspondences by subject.

| Description | emails |
| :---: | :---: |
| Extra resit and requests for extension of expiration date of results |  |
| Extra resit for a Module component allowed | 5 |
| No extra resit for Module component permitted | 2 |
| Extension of the expiration date of Module component results | 71 |
| Resit (component) MSc-course allowed | 3 |
| Variations in educational program |  |
| Free electives (minor) bachelor | 4 |
| Individual program BSc | 4 |
| Free elective program MSc | 1 |
| Individual program MSc | 3 |
| Double degree MSc colloquium allowed | 1 |
| Exemptions to admittance |  |
| Exemption to admittance allowed | 6 |
| No exemption to admittance allowed | 1 |
| Exemption decision on the bases of earlier achieved competences |  |
| Exemption for (parts of) a course allowed | 3 |
| No exemption for (parts of) a course | 4 |
| Fraud and plagiarism |  |
| Suspicion of fraud or plagiarism | 0 |
| Penalty as a result of fraud or plagiarism | 4 |
| Complaints |  |
| Board of Appeal for Examination requests mediation | 0 |
| Complaints | 1 |
| Cum Laude in case of exceeding throughput time |  |
| Cum Laude rejected | 0 |
| Cum Laude awarded | 1 |
| Miscellaneous |  |
| MSc-Thesis in Dutch allowed | 0 |
| MSc-Thesis in Dutch not allowed | 0 |
| No decision possible | 4 |
| Other | 10 |

### 2.7 Other activities

In February reports of the Limited Framework Programme Assessments came available. The general recommendation for all programmes is refinement of the final assessment of the programmes. This was already on the attention list, but the Programme Assessment gave valuable and specific recommendations.

On the $18^{\text {th }}$ November Arjen Hoekstra, the chair of the examination board, died unexpected. As vice-chair, Prof.dr.ir. A.G. Doreé took over the role of chair of the examination board.

In 2019 the Institutional Audit took place. The examination boards of the UT joint effort in preparation using the platform of examination board. This leaded to a central landing point on the UT website for all examination boards and an update and harmonisation of the information of the examination board CE/CE/CME. A representative of the examination board was present at one of the meetings of the audit committee.

Three test assessments took place. The results of these test assessments were shared with the teaching team of the courses, the programme director and the examination board. Evaluation of the test assessment was planned for 2019, but will take place early 2020.

Tabel 2 Test assessments in 2019

| Date | Module |
| ---: | :--- |
| $14-02-2019$ | MOD05: Safety and Risk in Delta's [201500311] |
| $1-04-2019$ | MOD01: Introduction to Civil Engineering [201700150] |
| $9-07-2019$ | MOD06: Sustainable Civil Engineering [201800169] |

### 2.8 BSc and MSc graduations

Table 5 The number of graduations per educational program in the year 2019 (2018, 2017, 2016 and 2015)

| Educational Program | Total Succeeded | of whom with Cum Laude |
| :--- | ---: | ---: |
| Bachelor Civil Engineering | $55(50,55,53,68)$ | $3(3,3,0,4)$ |
| Master CEM | $51(45,46,65,56)$ | $6(3,5,8,5)$ |
| Master CME | $20(21,27,17,22)$ | $3(0,1,1,0)$ |

### 2.9 Reflection

With two new members in the examination board a fresh start was made.
The unexpected death of our chair, Arjen Hoekstra, resulted in a disruption in the work flow of the examination board. I showed impossible the find a new member for the examination board in 2019. As a result the examination board, temporary, did not fully comply to the demand of at least two professors according to the rules and regulations of the examination board (Early 2020 Prof.dr.ir. T.H. van der Meer joined the examination board).

The midterm goals of the examination board got delayed.
The institutional audit needed considerable attention for the examination board.

A start was made with the two intentions for 2019, the evaluation of the test assessment and the redefinition of the assessment forms for the $\mathrm{BSc} / \mathrm{MSc}$ final thesis, but both were not finalised.

### 2.10 Intentions 2020

The educational programmes CE/CEM/CME the intentions for 2020 are:

- Evaluation of the test assessment
- A redefinition of the assessments forms for the BSc CE, the MSc CEM and the MSc CME thesis
- Defining rules for double MSc degrees.
- Defining rules (such as: deficiency programmes, allowances and restrictions) students who switch from other programmes to CE.

