

Assessment procedure online thesis presentation and defense of the Graduation Project MSc Chemical Engineering

The Examination of the Graduation Project is described in Appendix 8b of Article 4.6 of the Regulations of the Examination Committee Chemical Engineering 2019-2020. This document gives a procedure how an online presentation and defense of a student's graduation project could be held. The remaining provisions of the assessment protocol for the Graduation Project Chemical Engineering, as described in the Regulations of the Examination Committee Chemical Engineering 2019-2020 (Appendix 8b of Article 4.6) will be maintained; see next page.

Procedure online presentation of Graduate Project MSc Chemical Engineering

A facilitator supports the process of setting up an online presentation. Before the actual presentation, the facilitator may be the graduation supervisor or anyone commissioned by the graduation supervisor. During the online presentation of the Graduate Project the graduation supervisor takes the role of facilitator.

NB. If it is technically possible, an audience is allowed to join the online presentation.

1. Responsibilities of the facilitator:
 - a. Before the actual oral presentation:
 - i. In consultation with the candidate the facilitator selects the most suitable online environment for the online presentation (e.g. Skype for Business, Canvas Conferences or Microsoft Teams).
 - ii. At least one day before the presentation, the facilitator (the graduation supervisor or anyone commissioned by the graduation supervisor) organizes a 'dress rehearsal' with the candidate and member of the research group to practice and validate the procedure including all technical aspects (e.g. drawing on a virtual white board).
 - iii. At least 30 minutes before the oral presentation, the facilitator receives the candidate's final slides of the presentation and shares these slides with the members of the graduation project committee.
 - iv. At least 30 minutes before the oral presentation, the facilitator will start the online meeting using the selected online environment. The facilitator will invite the members of the graduation project committee. The facilitator will make sure that the slides are visible for all participants. This will leave ample time to resolve any minor issues with connections such as use of microphones etc. and make the usual inventory of the questions and discuss protocol issues.
 - b. During the actual oral presentation and interrogation:
 - i. At the start of the oral presentation, the candidate is invited by the facilitator to join the meeting. The oral presentation and interrogation will follow the normal routine, the candidate's graduation supervisor will discuss the procedure and the candidate will start with the usual approximately 45 minute presentation including questions. The candidate will be the presenter.
 - ii. During the discussion the facilitator will act as moderator and will manage the time.
 - iii. During the following, approximately 30 minute, interrogation, the facilitator will act as moderator. The candidate will be the presenter.
 - c. During the deliberation by the graduation project committee:
 - i. Immediately after the defense the candidate is removed from the meeting by the facilitator and the normal deliberation can be held.
 - ii. The facilitator makes sure that the candidate is no longer part of the meeting.
 - d. After the deliberation by the graduation assessment committee:
 - i. The candidate is invited again by the facilitator to join the online meeting.
 - ii. The graduation supervisor gives feedback on all protocol aspects, including the detailed grading of the assessment elements.

Appendix 8b of Article 4.6 of the regulations of the Examination Committee 2019-2020 Examination of the Graduation Project

The following general rules apply:

- a. The final exam supervisor composes an **assessment committee**, which consists of at least four members, namely:
1. the graduation supervisor, being an associate professor or professor of the Department of Chemical Engineering and Chemistry (ST), who acts as chairperson;
 2. the project supervisor (a PhD student, postdoc, assistant or associate professor, or professor); if the graduation supervisor also acts as project supervisor, an addition member of the categories 3, 4 or 5 need to be appointed. In case the graduation project is carried out outside the university, the project supervisor may also be an expert from the external location;
 3. at least one other member (postdoc, assistant or associate professor or professor) of the Laboratory in which the student has been carrying out the graduation project;
 4. at least one member (assistant or associate professor or professor) working in one of the other Laboratories of the department or an expert from outside the department.

In case the chairperson / graduation supervisor is unable to meet these requirements with respect to composing the assessment committee in time, she is obliged to immediately notify the official secretary of the Board of Examiners of this fact in writing.

The graduation supervisor arranges a replacement in case a member of the assessment committee is absent due to unforeseen circumstances.

If they are appointed by the ST department and are employed as postdoc, UD, UHD, or HGL, the members of the assessment committee are also by definition appointed by the Examination Committee as examiner of the relevant Graduation Project.

- b. The **examination** consists of the following three components:
- **Written final thesis:** the student must see to it that all members of the assessment committee are in possession of a copy of the final thesis no later than 7 days before the planned oral presentation.
 - **Oral presentation:** the graduation supervisor arranges the time and place of the oral presentation. This presentation consists of an oral discourse, followed by a discussion: the total length of time is 45 minutes at most. In principle the oral presentation is public, takes place at TU/e, and is attended by the full assessment committee.
 - **Interrogation:** the graduation supervisor arranges the time and place for the interrogation. Preferably, the interrogation is held immediately following the oral presentation. The interrogation is done by the full assessment committee and will last about 30 minutes. At the student's request, a few people may be present as audience during the interrogation.
In case the material presented is confidential, after unanimous consent of the assessment committee it may be decided that the written final thesis remains confidential and the oral presentation and/or interrogation obtain a confidential status. Also in the case of confidentiality, the oral and written presentation of the entire graduation project must be such that all members of the assessment committee can form a well-founded judgment about the work carried out and the written and oral presentations.

- c. The assessment committee gives a well-founded advice to the graduation supervisor about the **assessment** of the graduation project by means of the form *Beoordelingsformulier Afstudeerproject* [Assessment form Graduation project]. Also based on this advice, the graduation supervisor, in her function as examiner, establishes the final examination grade.

The graduation supervisor sees to it that the official secretary of the Board of Examiners is in possession of the completed form "*Beoordelingsformulier Afstudeerproject*" at least 5 working days prior to the final-examination meeting during which the result of the final examination will be determined. The form must contain the following data:

- the composition of the assessment committee
- a semi-quantitative evaluation of the student's functioning on the following components:
 - o theoretical insight,
 - o execution and self-reliance,
 - o written presentation (report),
 - o oral presentation and defense,
 - o work efficiency

- the definite grade for the Graduation project, which may be expressed in a half number.
- together with the "Graduation Project Assessment form", a statement signed by the student is also submitted stating that the graduation report has been established in accordance with the rules of the TU/e Code of Scientific Conduct.
- d. Further regulations with respect to the **graduation thesis**:
 - A plagiarism check is done
 - On the evaluation form the student states that his / her thesis project has been carried out in accordance with the rules of the TU/e Code of Scientific Conduct.
 - The supervisor of the states on the assessment form that, to the best of her/his knowledge, the graduation thesis contains no forms of plagiarism.
 - If so desired, the supervisor can send the graduation thesis that must be checked for plagiarism to the official secretary of the Board of Examiners by e-mail: CSA.CEC@tue.nl, who will send the Urkund report for assessment to the supervisor within 5 working days at most. Basically, the graduation thesis to be checked for plagiarism will become part of the Urkund database unless the supervisor explicitly requests that it is not included in the database.
 - At least 5 working days prior to the final-examination meeting during which the result of the final examination will be determined, the student must have handed in a digital document in PDF/A format with a maximum size of 10 MB of the graduation thesis that has been approved by the graduation supervisor with the official secretary of the Board of Examiners via email: CSA.CEC@tue.nl.
 - In case the graduation thesis has to be treated confidentially, this has to be clearly indicated on the title page of the thesis and in the name of the document. Furthermore the period of time must be indicated during which confidentiality has to be observed. This period can be two years at most. The graduation supervisor decides whether or not a subject is confidential. If it can be expected that the contents of the thesis still cannot be published after the maximum 2-year confidentiality period, together with the complete graduation thesis the student must hand in a second version of the thesis that can be made public in which only the crucial confidential information from the complete thesis is lacking.
 - For externally funded graduation projects, the period of which confidentiality has to be observed, at the request of the graduation supervisor and after consultation with the GS program director by the Board of Examiners, be extended up to 5 years.
 - In case several students work together in one graduation project, for a correct assessment of each of them individually it is necessary that the contribution of each student appears from a separate written thesis and oral presentation.
 - Only in those cases where the graduation supervisor is of the opinion that it is advisable to write one combined graduation thesis, can the Board of Examiners grant permission to do so. However, the contribution of each of the students must then be made clear in unequivocally distinguishable paragraphs. The student(s) has (have) to lodge a reasoned request to make use of the latter possibility with the Board of Examiners no later than 1 week after the start of the Graduation project.
 - The graduation thesis will be filed in the digital student file and will be put at the disposal of the TU/e Library, which – if required – will observe the stipulations with regard to the provisions that are in force with respect to the report's confidentiality.