

Bachelor Thesis (E721038)

Course size (nominal values; actual values may depend on programme)

Credits 6.0 Study time 180 h Contact hrs 58.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 2)	Dutch	lecture	6.0 h
		seminar: coached	4.0 h
		exercises	
		project	48.0 h

Lecturers in academic year 2018-2019

Verberckmoes, An	TW11	lecturer-in-charge
Pollefliet, Leen	TW05	co-lecturer

Offered in the following programmes in 2018-2019

	crdts	offering
Bachelor of Science in Engineering Technology (main subject Chemical Engineering Technology)	6	A
Bachelor of Science in Chemical Engineering Technology	6	A

Teaching languages

Dutch

Keywords

Industrial chemistry, polymers, project work, teamwork, independence, presentation

Position of the course

With this Bachelor Thesis the student demonstrates he/she can independently and in group (3 to 5 students), implement the skills and scientific-disciplinary basic knowledge own to chemistry as a scientific discipline to a new problem. When presenting the results the students use the taught presentation techniques. The major focus lies on the independence of the students.

Contents

Project work:

- The subjects are linked to one or more research themes that are worked out to a project with a clear research question
- Literature search and processing
- Development of a methodology
- Carrying out experiments. The students look themselves for the necessary materials and chemicals
- Critical data processing and discussion of the results

Communication (presentation)

- Module 3a deals with the theory of good presentation techniques. In Module 3b the students give a short interim presentation. The theme of the presentations is determined by the titular(s) of the Bachelor Thesis.
- In Module 4 the students are being taught what the most important characteristics are of a large report, e.g. a bachelor thesis or master thesis, and layout of an academic poster.

Reporting:

- written (scientific paper and vulgarising article)
- poster presentation with oral explanation
- writing of a short report (self assessment) about their oral presentation (Module 3b).

Initial competences

This Bachelor Thesis course can as part of a GIT only be chosen as the last course of

the bachelor.

Final competences

- 1 Applying the basic engineering sciences and professional supporting methods and techniques in an innovative, practical and targeted way.
- 2 Goal-oriented searching, evaluating and processing of technical and scientific information and correctly referring to it.
- 3 Correct use of research methods and techniques when executing tasks.
- 4 Give evidence of accuracy, perseverance and critical reflection.
- 5 Give evidence of reasoning capability in variable circumstances.
- 6 Correct use of scientific and discipline's own technical terminology in Netherlands and English.
- 7 Execute in a targeted way specific tasks in a team, with attention to preconditions during the technical realisation.
- 8 Act in a responsible way with regard to the environment, quality and health in the labs.
- 9 Powerful and correct presenting (both verbally and non-verbally).
- 10 Writing a thesis (large report, paper) taking into account the different parts, the language, the writing style, the layout and source referencing.
- 11 Making an academic poster in a clear and correct way.

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, project, seminar: coached exercises

Extra information on the teaching methods

During the project work the assistants are available for guiding the activities and for providing information. The focus lies however on the independent work by the students.

Learning materials and price

- Portfolio Bachelor Thesis, available via the electronic learning platform Minerva
- Syllabus: 'Communicatie in vijf modules' - one syllabus for Modules 3 and 5 (Master year) - 250 pp. - Leen Pollefliet (to download from Minerva or order at Hermes)
- Text book 'Schrijven: van verslag tot eindwerk - do's & don'ts' - Leen Pollefliet - Academia Press (has already been purchased in 1 ba for Engineering Project) - last edition contains webtool with e.g. video lessons and exercises.
- Hand-outs of the slides of the explanation sessions on Minerva

References

Course content-related study coaching

Assistance during the project work

Evaluation methods

continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

Oral examination, participation, skills test, peer assessment

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible in modified form

Calculation of the examination mark

- Participation: 10 %
- Peer-evaluation: 10 %
- Work piece (scientific paper (30%) + vulgarising article (10%))
- Interim presentation (Module 3b): 10 %
- Poster + poster presentation: 30 %