Due to Covid-19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course Specifications
Valid as from the academic year 2020-2021

Quality Assurance, Healthcare and Environmental Management in the Chemical Industry (C003991)

Course size
Credits 5.0  Study time 130 h  Contact hrs 42.5 h

Course offerings and teaching methods in academic year 2020-2021
A (semester 2)  Dutch  Gent  excursion  10.0 h
  seminar: coached exercises  2.5 h
  lecture  30.0 h
  online seminar: coached exercises  0.0 h
  online lecture  0.0 h

Lecturers in academic year 2020-2021
Van Hecke, Kristof  WE06  lecturer-in-charge

Offered in the following programmes in 2020-2021
Bachelor of Science in Chemistry  crdts offering
5  A

Teaching languages
Dutch

Keywords
Quality assurance, safety, healthcare, environmental protection, company visit

Position of the course
To provide a general insight in the quality, healthcare and environmental management of chemical companies in a broader social context.

Contents
This course is a general introduction to the quality, healthcare and environmental management concepts that are applied in modern chemical companies. A number of items is discussed in a broader social and economical context.
Quality management: Sustainability and integral quality, health and environmental care; Lean Six Sigma; Safeguarding product quality in the chemical industry
Healthcare management: safe handling of reactive chemicals
Environmental management: Current environmental themes; Quality of surface water; Biological water purification; Water purification: energy and raw material factory; Statistical continuous process control
Environmental techniques: Water treatment techniques; Quality of air; Air treatment techniques; Rational energy consumption; Kinney-analysis
Excursion: Chemical production; Water purification on industrial scale; Lab techniques

Initial competences
The students should have obtained credits for the curriculum courses: ‘General chemistry’ or have acquired the specific competences aimed for, via equivalent curriculum subjects, to be proven by credit(s).

Final competences
1 General knowledge and insight in the quality, safety and environmental management of research laboratories and chemical plants.
2 To get the discussion going with respect to the social and technical aspects of an environmental problem.

Conditions for credit contract

(Approved)
Access to this course unit via a credit contract is determined after successful competences assessment.

Conditions for exam contract

This course unit cannot be taken via an exam contract.

Teaching methods

Excursion, lecture, seminar: coached exercises, online lecture, online seminar: coached exercises.

Extra information on the teaching methods

Because of COVID19 changed working methods can be rolled out when proven necessary.

Learning materials and price

Syllabus in Dutch (price: ± € 10-).
Lectures slides (available through Ufora).

References

Course content-related study coaching

Individual education by professor by appointment.

Evaluation methods

d-of-term evaluation and continuous assessment

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

Oral examination

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

Oral examination

Examination methods in case of permanent evaluation

Participation

Possibilities of retake in case of permanent evaluation

examination during the second examination period is not possible

Extra information on the examination methods

Evaluation of insight in the basic concepts (see contents).
Evaluation of application of these basic concepts in effective issues.
Because of COVID19 changed evaluation methods can be rolled out when proven necessary.

Calculation of the examination mark

19/20 periodic evaluation (oral examination with written preparation)
1/20 permanent evaluation (excursion, participation)
Students who are absent without any well-justified reason or who do not participate in all evaluation methods (excursion, ) of the continuous assessment, get a non-deliberable examination mark.